

183

# TOWING VESSEL NAVIGATIONAL SAFETY ACT OF 1993

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Y 4. M 53:103-86

ARING

FORE THE

Towing Vessel Navigational Safety A...

MITTEE ON

COAST GUARD AND NAVIGATION

OF THE

COMMITTEE ON

MERCHANT MARINE AND FISHERIES

HOUSE OF REPRESENTATIVES

ONE HUNDRED THIRD CONGRESS

SECOND SESSION

ON

**H.R. 3282**

**A BILL TO AMEND TITLE 46, UNITED STATES CODE,  
TO IMPROVE TOWING VESSEL NAVIGATIONAL  
SAFFETY**

MARCH 3, 1994

**Serial No. 103-86**

Printed for the use of the Committee on Merchant Marine and Fisheries



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# TOWING VESSEL NAVIGATIONAL SAFETY ACT OF 1993

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THURSDAY, MARCH 3, 1994

HOUSE OF REPRESENTATIVES,  
SUBCOMMITTEE ON COAST GUARD AND NAVIGATION,  
COMMITTEE ON MERCHANT MARINE AND FISHERIES,  
*Washington, DC.*

The Subcommittee met, pursuant to call, at 10:10 a.m., in room 1334, Longworth House Office Building, Hon. Gerry E. Studds (Chairman, Committee on Merchant Marine and Fisheries) presiding.

Present: Representatives Tauzin, Hughes, Barlow, Stupak, Hochbrueckner, Schenk, Lambert, Coble, Gilchrest, and King.

Also Present: Representative Studds, ex officio.

Staff Present: Jeffrey Pike, Chief of Staff; Mary Kitsos, Chief Clerk; Sue Waldron, Press Secretary; Elizabeth Megginson, Staff Director; Matt Szigety, Coast Guard Fellow; Catherine Tucker, Legislative Clerk; Bill Wright, Professional Staff; Jim Adams, Professional Staff; Douglas Cheramie, Professional Staff; Joan Bondareff, Senior Counsel; Lee Crockett, Professional Staff; Harry Burroughs, Minority Staff Director; Cyndy Wilkinson, Minority Chief Counsel; Ed Lee, Minority Professional Staff; Rebecca Dye, Minority Counsel and Margherita Woods, Staff Assistant.

Mr. STUDDS. [Presiding] The Subcommittee will come to order.

## STATEMENT OF HON. GERRY E. STUDDS, A U.S. REPRESENTATIVE FROM MASSACHUSETTS, AND CHAIRMAN, COMMITTEE ON MERCHANT MARINE AND FISHERIES

Mr. STUDDS. Because our Subcommittee Chair is apparently, along with much of the metropolitan area, on the 14th Street Bridge at the moment and on his way and more likely to arrive soon, and because the Secretary has a limited amount of time, we are going to begin the hearing.

I welcome you, Mr. Secretary. We have been working closely with you on maritime reform and a number of other projects and this is your first appearance, I guess, before any component of this committee. I welcome you and extend a very warm and very permanent invitation to return at any time you wish.

What brings you to us today is your refreshing leadership in the efforts to improve the safety of our tug and barge industry and the initiative you took immediately after the tragic Amtrak accident near Mobile, Alabama, to insure that all agencies of your department are coordinating their activities to enhance safety.

When the Sunset Limited derailed because a barge hit a railroad bridge, as you know, 47 people lost their lives. Tragedies of this magnitude do not occur every day, but barge accidents apparently do happen on a daily basis.

According to the Coast Guard, more than 12,900 accidents involving uninspected towing vessels occurred between 1980 and 1991, which is an average of nearly three per day.

We are only on the third day of the third month of this year and already we have seen several serious accidents. On January 7th the barge, Morris J. Berman, adrift after its tow line broke, struck a coral reef off the coast of San Juan and spilled 600,000 gallons of oil.

On January 19th, the barge struck a railroad bridge near Amelia, Louisiana, knocking its railroad tracks six inches out of alignment. Fortunately, the bridge tender notified Amtrak and the Sunset Limited, the very train that had crashed in September the year before, was stopped 10 minutes away from that damaged bridge.

On February 10th, the tug, Edwin Bisso, struck the ferry, St. John, on the Mississippi River near New Orleans injuring 12 people, and on February 24th, the tug, John J.D., capsized and sank in the Ohio River near Ashland, Kentucky. Fortunately, the tug's two-man crew was rescued unharmed.

Why are there so many accidents involving tugs and barges? Part of the problem is that these vessels are what the Coast Guard calls uninspected towing vessels. Aside from the obvious lack of inspection, this means these vessels have only minimal equipment requirements. For example, they don't have to carry a radar, compass or charts. They have only minimal manning requirements. They enjoy licensing requirements that are among the most lenient in the maritime industry.

Mr. Tauzin has introduced a bill, as I am sure he will confess, H.R. 3282, which addresses some of these problems. It is a good first step and I support it, but the bill does not address two important safety issues, inspection and manning. Every other segment of the maritime industry is inspected, passenger vessels, cargo vessels and oil tankers. The barges that carry oil or hazardous material as cargo are inspected by the Coast Guard, but the towing vessels that control the movement of these barges are not, and there are over 7,000 of them.

Manning requirements for towing vessels are much less stringent than for any other type of vessels. They do not have to carry masters, mates, able seamen or even documented mariners. This is a little hard to believe.

I look forward to working with you, Mr. Secretary, with Chairman Tauzin, Mr. Fields, others in the Minority, including Mr. Coble, who share this concern, to develop legislation that will bring the manning and inspection requirements into the 20th Century some time before the beginning of the 21st, and again, I want to thank you, I salute you. You have brought a breath of fresh air to your department, and I think you have made a lot of us feel better about a lot of undertakings we have had under way here for a great many years.

We have surprised some folks and I think we have some surprises still to go. It has been a delight working with you. We look

forward to it. And I am going to hand you into the tender mercies, again, of the distinguished Chairman of the Subcommittee, who has survived the 14th Street Bridge. Billy, why don't you take over.

**STATEMENT OF HON. W.J. (BILLY) TAUZIN, A U.S. REPRESENTATIVE FROM LOUISIANA, AND CHAIRMAN, SUBCOMMITTEE ON COAST GUARD AND NAVIGATION**

Mr. TAUZIN. [Presiding] Thank you, Mr. Chairman, and I will want to talk to you, Mr. Secretary, about the new parking lot we are building out there on the 14th Street Bridge. I am not going to add a lot to what the Chairman has already said. You know how important we feel this issue is, particularly in view of the recent tragedies and the continued incidents of collisions between barges and bridges and the importance to not only overland transportation, but inland water transportation, of these hearings in the new bill we propose.

I know you have done some great work in looking at the same issue and we are very anxious to hear your perspective on this. I am going to yield to the Ranking Minority Member, Mr. Coble, who is here to make an opening statement for the Minority.

Mr. Coble.

[The statement of Mr. Tauzin follows:]

**STATEMENT OF HON. W.J. (BILLY) TAUZIN, A U.S. REPRESENTATIVE FROM LOUISIANA, AND CHAIRMAN, SUBCOMMITTEE ON COAST GUARD AND NAVIGATION**

The Subcommittee is honored to welcome Secretary Federico Peña. Secretary Peña presence this morning is testimony to his commitment to enhance safety and promote commerce on our nation's waterways. This hearing was scheduled to receive Secretary Peña recommendations as well as input from the public to improve H.R. 3282 "The Towing Vessel Navigational Safety Act of 1993".

Back in October, this Subcommittee met to investigate the causes of two fatal towing vessel accidents. The first occurred last May, when a towboat hit the Judge Seeber Bridge in New Orleans, causing the bridge to collapse and resulting in the death of a thirty-one year old woman and her unborn child.

The second accident is sadly familiar to all of us. Last September, a towboat and its barges hit the Big Bayou Canot Bridge in Mobile, Alabama, derailling Amtrak's Sunset Limited passenger train and killing 47 people. Both tragic accidents were caused by operator error.

Looking back at the accidents, it is clear that existing Federal regulations are not enough to minimize the potential for human error aboard towing vessels. H.R. 3282 was introduced to address specific deficiencies in current towing vessel operating requirements and to look at new ways to enhance safety on our inland waterways.

H.R. 3282 will require all towing vessels to carry the basic navigational tools which the vast majority of safe, responsible, towboat operators already consider standard equipment, including marine charts and a radar. The bill will also ensure that towboat operators demonstrate proficiency using the tools necessary for safe navigation before being licensed.

Immediately following the Amtrak investigation, precious response time was lost when the operator failed to promptly inform the Coast Guard of the accident. The delay may have cost human lives. H.R. 3282 will tighten marine casualties reporting requirements.

H.R. 3282 supports Secretary Peña's comprehensive review of the adequacy and effectiveness of manning and licensing requirements for the operation of towing vessels. The Secretary's findings were made available to the Committee on December 10, 1993. I want to thank Secretary Peña for the priority that this regulatory review received and I look forward to discussing the Department's recommendations.

Finally, H.R. 3282 looks to fundamentally improve safety and commerce on our inland waterways. The bill commissions a report on the feasibility of establishing a Differential Global Positioning Satellite (DGPS) navigational system on our inland waterways. DGPS technology is being applied to coastal navigation and aeronautical navigation. The application of DGPS technology on our inland waterways should receive the same consideration.

**STATEMENT OF HON. HOWARD COBLE, A U.S. REPRESENTATIVE FROM NORTH CAROLINA, AND RANKING MINORITY MEMBER, SUBCOMMITTEE ON COAST GUARD AND NAVIGATION**

Mr. COBLE. Thank you, Mr. Chairman. I thank you for having called this hearing. I am pleased to join with you, Chairman Studds, Congressman Fields in introducing the Towing Vessel Navigational Safety Act. I am an original cosponsor of this important safety legislation and strongly believe it will be an important tool in helping to protect those who ride over on our Nation's inland waterways.

Our subcommittee's hearing last October regarding the deadly Amtrak Sunset Limited accident dramatically illustrated the necessity of increased safety standards on inland towing vessels. Currently, I am confident this is correct, a bridge-to-bridge radio telephone is the only navigational or communication equipment required aboard a towing vessel, and this, it appears to me, is unacceptable.

I also strongly believe that operators and crew members of inland vessels must be required to know how to use the informational equipment on board. The Mauvilla had a radar system, but I am advised that some of the crew members misidentified the bridge on their radar screen for another barge. That can certainly be deadly if you are going to tie up alongside a barge thinking it is a barge that turns out to be a bridge. We know what the result from that is.

Equipment, sophisticated as it may be, it would be worthless if crew members cannot properly operate it. There is some question, Mr. Secretary, admiral, you all may remember about the compass aboard that vessel. Well, I have been told by some, well, it makes no difference. That would have contributed in no way, whether we had a compass or not. I think that may well be subject to interpretation and I would like to hear more about that as this hearing develops.

Not unlike the Chairman, I appreciate Secretary Peña being with us along with Admiral Henn and the other distinguished witnesses, who will discuss this in more detail as the hearing develops.

Mr. Chairman, in closing, I also would like to extend congratulatory remarks to Admiral Henn for his selection as the next Vice Commandant of the Coast Guard. Admiral.

Admiral HENN. Thank you again, Mr. Chairman.

Mr. TAUZIN. Thank you, Mr. Coble, and I, too, would join those salutations, Admiral. You have provided remarkable and, indeed, tremendous assistance to this committee in the role you have served in the Coast Guard, and I know you are going to add a great deal as Vice Commandant.

We would ask now, are there any other opening statements. Ms. Schenk is next.

**STATEMENT OF HON. LYNN SCHENK, A U.S. REPRESENTATIVE FROM CALIFORNIA**

Ms. SCHENK. Thank you, Mr. Chairman. I will dispense with the formal opening statement in light of the time constraints of our distinguished panel, just to say thank you for holding this hearing.

I had the privilege of holding a hearing on the issue on our Energy and Commerce Subcommittee on Transportation and Hazardous Waste where the Railroad Administration provided a lot of information, but we needed a lot more. And, Secretary Peña, I join my hand in the salute of our full committee Chairman, to you, and not just this issue, but the leadership that you have shown on such diverse issues as the earthquake in Los Angeles and high speed rail.

You are my kind of leader, hands on and get the job done and it is a pleasure working with you and I welcome you, and, Admiral Henn, welcome you as well and look forward to your remarks.

Mr. TAUZIN. Thank you, Ms. Schenk.

The Chair will now recognize Mr. Coble for a unanimous consent request.

Mr. COBLE. Thank you. I would ask unanimous consent to have introduced into the record statements by Congressman Fields and Congressman Pombo.

[The statements follow:]

STATEMENT OF HON. JACK FIELDS, A U.S. REPRESENTATIVE FROM TEXAS, AND RANKING MINORITY MEMBER, COMMITTEE ON MERCHANT MARINE AND FISHERIES

Mr. Chairman, I strongly support the provisions of the Towing Vessel Safety Act to increase the level of navigational safety on our inland waterways. We must act now to minimize the risk to innocent individuals travelling on the bridges over inland waters. Nearly 50 lives were lost last year in accidents related to navigation safety, not to mention the environmental and economic losses resulting from towing vessel personnel errors.

On May 28, 1993, a 31-year-old woman who was five months pregnant was killed and two other motorists were seriously injured when a 145-foot section of the Judge Seeber Bridge in New Orleans, Louisiana, collapsed after it was struck by a tug and barge.

On September 22, 1993, Amtrak's Sunset Limited derailed while crossing the Big Bayou Canot Bridge north of Mobile, Alabama. The accident was the worst in Amtrak's history, and claimed 47 lives. Moments before the derailment, the bridge was severely damaged when it was struck by a tug pushing several barges. The tug operator was operating in heavy fog without basic navigational tools. The National Transportation Safety Board is investigating the accident, and is scheduled to complete the investigation this spring.

Finally, on January 7, 1994, another towing vessel accident occurred when a barge spilled 750,000 gallons of diesel oil off the coast of Puerto Rico. In this case, the towing vessel operator used an improperly repaired towing hawser to repair a tow. The towing hawser parted, allowing the barge carrying the oil to float free and run aground on a reef. The Coast Guard is still involved in the cleanup of the oil spill.

Following the Amtrak accident, Secretary of Transportation Peña directed the Coast Guard to review existing tug and barge safety standards and make recommendations regarding the need for additional safety requirements for the tug and barge industry. I welcome the Secretary to the hearing today, and hope that he will provide additional information to us on which additional vessel safety requirements will promote inland waterway safety.

I also extend a warm welcome to Tom Kornegay, President of the Gulf Ports Association. I appreciate his statements in support of my bill, H.R. 3812, the Waterways Obstruction Removal Act of 1994, and hope that we can solve the wreck removal problem that currently exists in the Houston Ship Channel and in waterways across the country.

The increased safety requirements contained in H.R. 3282 will not only protect innocent individuals but will also aid in keeping our nation's ports free of obstructions and open to commerce. I look forward to early enactment of H.R. 3282.

Thank you, Mr. Chairman.

STATEMENT OF HON. RICHARD POMBO, A U.S. REPRESENTATIVE FROM CALIFORNIA

Mr. Chairman, thank you for holding today's hearing on the Towing Vessel Navigation Safety Act of 1993, H.R. 3282. Over the last year, we have seen random accidents involving towing vessels. Even though it is human nature that accidents will occur, it is only appropriate that Congress take steps to try to prevent the loss of life, the destruction of property, and to protect the environment when incidents occur on our country's inland waterways.

As you may be aware, I have the privilege of representing a substantial amount of the California Delta. As you travel around my Congressional District you begin to realize that the waterways are transverse with numerous automobiles and train bridges. Though I have been informed that these bridges in my district have warning lights and the Coast Guard is taking the necessary measure to ensure the free and safe flow of commerce through the Delta, nevertheless I hope we can take steps to make both the waterways in California and our nation's safer. As we move along with this important legislation, I hope the Subcommittee will take actions to improve towing safety while taking into consideration the economic consequences our actions will have on this industry.

I especially want to thank Secretary Peña for appearing here today. I look forward to your testimony and hearing more about the Department of Transportation's plan to enhance the safety on the waterway transportation system which was delivered to Congress last year.

Finally, Mr. Chairman, I am sure the other distinguished witnesses today will provide insight into what steps our committee can and should take to improve the safety of towing vessels.

Thank you.

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STATEMENT OF HON. WILLIAM O. LIPINSKI, A U.S. REPRESENTATIVE FROM ILLINOIS,  
AND CHAIRMAN, SUBCOMMITTEE ON MERCHANT MARINE

Thank you, Mr. Chairman. I would like to take this opportunity to commend both you and Secretary Peña for your efforts to improve the safety of our inland waterways.

Last September, the eyes of the Nation were drawn to Mobile, Alabama, and the worst accident in Amtrak's history. This Subcommittee held an oversight hearing shortly after the incident and the Department of Transportation began its own investigation into the cause of the accident and steps which can be taken to prevent such a tragedy from reoccurring.

We must do all we can to ensure the safe navigation of America's inland waterways. H.R. 3282 is a safety bill.

I thank today's witnesses for appearing here today and I look forward to their testimony.

Thank you, Mr. Chairman.

Mr. TAUZIN. Are there any other requests for opening statements?

Then the Chair is pleased to announce, to welcome and to formally introduce our Secretary of Transportation, Secretary Peña, and Admiral Henn for perspectives of both the Department and the Coast Guard on this very important issue.

Secretary Peña.

**STATEMENT OF HON. FEDERICO PEÑA, SECRETARY, DEPARTMENT OF TRANSPORTATION ACCOMPANIED BY REAR ADMIRAL ARTHUR E. HENN, CHIEF, UNITED STATES COAST GUARD, OFFICE OF MARINE SAFETY, SECURITY AND ENVIRONMENTAL PROTECTION**

Secretary PEÑA. Thank you very much, Mr. Chairman, and Members of the Subcommittee. Good morning to all of you, and, again, I would like to commend you, Mr. Chairman, and everyone for having this hearing and we are delighted to be here to share our thoughts about how we can improve the safety of these waterways.

Accompanying me this morning, Mr. Chairman and Members is Rear Admiral Henn, Chief of the Coast Guard's Office of Marine Safety, Security, and Environmental Protection and as all of you have indicated already, you know him well, and I am very delighted that he is with me today because I have spent a considerable amount of time with him over the last year and can tell you that his past performance and outstanding experience and capability will now be brought in a different way to the country in his new position. But as respects this particular topic, I could not think of a better expert to have with us today, and he will obviously be available to handle more specific questions.

Before I begin, I would like to convey to Chairman Studds and to you, Mr. Chairman, and to Congressmen Fields and Coble the appreciation of the Department and the administration for the very serious and thoughtful approach that you have taken toward assessing the problem of towing vessel navigational safety in H.R. 3282.

Similarly, this subcommittee is to be complimented for its attention to this important issue and for scheduling this hearing to obtain the necessary legislative record.

Today the subcommittee will hear testimony from a wide range of witnesses on the best ways to ensure towing vessel navigational safety. Let me say that yesterday I had an opportunity to meet with some of the industry leaders and they can speak for themselves when they discuss their positions in the second panel, but let me just generally say that we were very pleased with that meeting because we walked away with an agreement and an understanding that we would work together in trying to address these issues, and that kind of cooperative approach from industry is very much needed and I appreciate it and I applaud it.

We all share the frustration of the Coast Guard when it is called to rescue the victims of a tragedy that might have been prevented if the operator of the vessel had had better navigational equipment aboard or better training. Clearly, the collapse of the Judge Seeber Bridge in New Orleans and the Amtrak derailment in Bayou Canot in Alabama were great tragedies. The loss of life was staggering. And I can tell you personally that seeing the victims, comforting the survivors and meeting the bereaved brings home the human cost of safety lapses.

While the oil spill in Puerto Rico fortunately did not claim any lives, I was there the day of the spill with Administrator Browner, and its environmental and economic effects were widespread. The issue before us are very complex. As we take steps to ensure that tragedies such as these are prevented in the future, let us recognize that there is no easy solution or a quick fix to which we can turn to eliminate the possibility that human error, the largest cause of these problems, equipment malfunction or adverse environmental conditions, will occur. But let me assure you, Mr. Chairman, and others, that this issue, a commitment to improving the safety in this particular area, and safety on all of our transportation modes throughout the country, is one of our highest priorities.

If you have not yet received the Department's seven-point strategic plan, which we issued some time ago, I will get that for you and

the Members, but the whole area of safety and security are new priorities with a new commitment and focus from this Secretary and from this Department.

On September 30th, 1993, I wrote to the Congress outlining a series of safety reviews that we initiated in response to the derailment of Amtrak's Sunset Limited. On December 10th of 1993, I sent to the Congress our final report entitled, "Review of Marine Safety Issues Related to Uninspected Towing Vessels," containing recommendations for changes to the marine safety and waterways management programs. A copy of those recommendations is attached to my statement.

That report formed the basis for the four-pronged approach we developed to increase safety in the towing vessel industry. First, more stringent licensing requirements for operators of uninspected towing vessels must be developed, and these licenses should have levels of qualification.

Restrictions for such levels of qualification may be based on the route, on gross tonnage or horsepower of the towing vessel and the type of towing configuration. The basic three-year apprenticeship should qualify an applicant, we believe, only for basic licenses. Operators must be proficient in the use of navigational and safety equipment.

In order to advance beyond a basic license, an operator should be required to attend practical, hands-on training or a Coast Guard-approved simulator course and also pass a written, practical or simulator examination, or a combination of these.

As a complement to this, towing vessel owners must employ qualified, experienced personnel as operators in charge of these vessels.

Secondly, requirements for radar and upgraded navigational equipment on board uninspected towing vessels must be established. Specifically, operators should be required to have on board as equipment up-to-date marine charts for the area to be transited, current or corrected navigational publications, and a marine radar system for surface navigation. In addition, a compass and a depth finder may, and I want to emphasize the word "may" here, may be necessary tools for safe navigation in certain areas and we can explore that in greater detail.

Thirdly, notification of accidents must be assured and also assured more promptly. Particularly where barges are concerned and an operator might be in some doubt about whether a tow has been lost or might have struck something, the rule should be, when in doubt, report. To enforce this requirement, the penalty for failure to report immediately must be increased significantly, and we recommend raising the minimum penalty from \$1,000 to \$25,000.

Fourthly, aids to navigation in the vicinity of bridges must be improved where necessary. I would like to point out that damaging an aid to navigation can result in a criminal penalty of up to \$2,500 and/or imprisonment up to a year and the individual responsible must also pay to repair or reposition the aid to navigation. Experience has proven this level of fine is too low to justify extensive prosecution. That is something that we have learned very recently. It is not a high enough priority for prosecution. Therefore,

we should consider increasing the criminal penalty and instituting a civil penalty that can be assessed by the Coast Guard.

Anyone who damages an aid to navigation must immediately report it to the Coast Guard. Failure to report, particularly when an accident results, can lead to an adjudicative process culminating in severe penalties up to revocation of the individual's license.

Bridges that have been found to pose an unreasonable obstruction to navigation under the Truman-Hobbs Act must be repaired or replaced. Between 1980 and 1991, 773 tows struck bridges. Nine bridges presently have been declared unreasonable obstructions to navigation under the Truman-Hobbs Act and are either under design or reconstruction today.

Additionally, there are approximately 52 others that are either being or will be investigated to determine whether they are unreasonable obstructions to navigation according to the Truman-Hobbs criteria, and I should note that the President's budget provides for funding to repair these highway bridges from the Highway Trust Fund.

Many details of this four-pronged approach will be developed during the regulatory process. Where the Department could implement some of these proposals without a rulemaking or legislation, action is already underway. For example, the curriculum of the maritime radar courses is under review to determine if the current courses are adequate for specialized operations on some waterways, particularly on our western rivers, and the Admiral has indicated that that should be completed by the end of this month or early next month.

The review will also determine if the existing courses reflect state-of-the-art radar technology and operational procedures. The Commander of the Eighth Coast Guard District in New Orleans has established a Coast Guard industry team to identify all waterways, including the Bayou Canot where new or additional aids to navigation may be needed. Similarly, a review of all bridges crossing navigable waters is also underway.

Additionally, Mr. Chairman, there are certain issues that should be studied in depth. Specifically, we should examine the adequacy and effectiveness of our manning and inspection requirements and look at whether the laws for all other commercial vessels on inspection and manning should apply to the inland waterway towing industry.

In the past, it was felt, because of differing operating conditions, mandatory manning levels were not necessary and the cost of industry-wide Coast Guard inspection would be too high for any expected benefits. However, it has been some time since this policy was reviewed and I think it is now time to do so. Voluntary industry standards may be an appropriate approach to raising safety performance, but we should also examine whether governmental requirements are necessary.

And let me say, Mr. Chairman, I know this is a very difficult, complex and controversial issue. We have no prejudgment about this analysis, but we think it has to be done in a very comprehensive, thorough fashion so we can respond to your questions and questions raised by others and finally determine whether we have updated information about this particular issue of manning.

Statutory and regulatory provisions currently dictate the manning level of the navigation watch aboard a towing vessel. Both the work-hour limitations and the navigation watch provisions affect the manning complement on an uninspected towing vessel. Clearly, all inland towing vessels should have someone aboard who is knowledgeable in the operation and maintenance of the engineering systems and an operator competent to pilot the vessel through the waters in which it is traveling.

The larger question of whether masters, mates, engineers or pilots should be required is much more difficult to answer. The industry is diverse and many towing companies are small. The Coast Guard has embarked on a major research project to develop an analytical, function-based model for rationalizing our approach to determining the minimum crew complement required for safe operation of a vessel.

The model will include work-hour limits, hours of operation, and potential emergency situations as essential factors. Once completed, it will give us an accurate picture of how we should approach manning levels in the future.

As I said, Mr. Chairman, and members of the subcommittee, safe transportation is a very high priority for me. I believe we should move now to bring the enhanced licensing and equipment requirements into force and take a careful look at whether we need to do more in the areas of manning and inspections. The loss of life in the Judge Seeber Bridge collapse and the Amtrak derailment was devastating, but every day property is damaged and cargo is lost in towing accidents.

My recommendations will not only save lives, but make the shipment of goods by inland barge more reliable. The inland barge system is an extremely efficient and economical transportation method for many shippers. It is our job to make sure that it is as safe as possible for all.

Technology has an extremely important role to play in towing vessel safety. The Global Satellite Positioning System, which I have talked about at length before other groups, developed by the Department of Defense and the augmentation of Differential Global Positioning System, being developed for civil use by the Department of Transportation agencies will provide increased accuracy, productivity, safety and efficiency in sea navigation by providing marine navigators with the first precise, worldwide, continuous positioning and timing service.

As a result, commercial shipping will be safer, more efficient, reliable and economical. Augmented with DGPS and combined with the developing electronic chart display and information system, it will significantly improve waterway and harbor safety. The pronounced safety benefits of these systems will be a major improvement in avoiding collisions and groundings and the resulting human and environmental losses such events cause. I am very excited about the possibilities of this new technology, and therefore I support the recommendation for study in H.R. 3282.

Even if we employ, however, the latest technology for preventing accidents and improving survivability if one occurs, we must acknowledge and recognize that most accidents in all modes of transportation are caused by human error. Very few accidents are

caused by equipment or structural failure. Most are the result of poor judgment or performance by the operator of the equipment.

A review of marine casualties for the period 1980 through 1991 involving towing vessels of fewer than 300 gross tons shows that approximately 60 percent of the marine casualties were attributable to human error. Since the performance of the operator of the vessel is crucial in emergencies, we must ensure that the operator is well-trained, proficient in navigation, and alert.

At the Department of Transportation, we have taken significant steps to reduce operator error. Mariners are already subject to the Department's drug testing requirements and the Coast Guard's alcohol testing program. Under a proposal I discussed earlier, operators would be subject to licensing requirements that would ensure proper training and proficiency with navigational and safety equipment.

Mr. Chairman, I want to thank you for this opportunity to share my views on how we can increase safety in the vessel towing industry and rather than offer legislation on behalf of the administration, I would like to work with you and the members of the subcommittee to forge an overall approach that can be enacted and signed into law, we hope, before September 22nd, 1994, the first anniversary of the tragic Bayou Canot accident. So Admiral Henn and I are prepared to answer your questions and again, thank you very much for this opportunity to be here today.

[The statement of Secretary Peña may be found at end of hearing.]

Mr. TAUZIN. Thank you, Mr. Secretary, and Admiral Henn. Let me first thank you for setting that target day. I think that is extremely important. We cannot allow time to slip without passing important legislation. In that regard, you seem to be indicating that the work that you are now doing and want to continue to do to build the model for manning and inspection might take some time.

Are you suggesting that we should proceed immediately with the recommendations that we have found consensus on and then proceed separately with the manning and inspection proposal when that model is completed?

Secretary PEÑA. Mr. Chairman, yes, and to help you and the Members of the Subcommittee in this effort, perhaps it would be useful for us to produce for you a document that indicates all of the administrative, field, legislative and other changes which we believe are necessary with target dates of completion. We have, ourselves, an internal document that indicates what our own target dates are.

For example, the improvement manuals we hope to complete by this month.

Admiral HENN. Yes, sir.

Secretary PEÑA. And we have other target dates. Why don't we share that with you and perhaps we could work together in determining how much we could get done.

[The following was submitted:]

## REVIEW OF MARINE SAFETY ISSUES

Following the Amtrak casualty on September 22, 1993, the Secretary of Transportation directed the Coast Guard to conduct a review of related Marine Safety Issues. The review recommended changes in the areas of operator training and qualifications, vessel equipment, bridge safety, casualty reporting requirements, and aids to navigation.

A Coast Guard team immediately reviewed the aids to navigation in the vicinity of Big Bayou Canot and added warning signs in November, 1993.

The Coast Guard's review of towing vessel safety was made available to the public and a public meeting was held on April 4, 1994, to seek public comment.

The Coast Guard also initiated a review of all bridges for adequacy of fendering and lighting, with a completion date of August, 1994. Changes have been incorporated in the Coast Guard's Aids to Navigation Manual and soon may be made as a result of the review.

We are seeking legislation to amend 46 USC 6103 to increase the maximum civil penalty from \$1,000 to \$25,000 for failing to report a marine casualty.

The Coast Guard is currently reviewing existing radar observer training courses for applicability to towing vessel operators. This review should be completed August, 1994.

The Towing Safety Advisory Committee is convening a special working group to review and propose changes to the Operator of Uninspected Towing Vessel license. This review should be completed by October, 1994.

Mr. TAUZIN. That would be very helpful because, as you know, when the legislation begins moving, there is an attempt to continue building upon it all the different and alternative solutions and it is important, I think, for all our purposes, that we not let that process delay the completion of legislation that we all agree upon, and where there is no argument, and knowing the timetable would be very helpful for us and we would appreciate that.

You mentioned today that the administration is now recommending in its budget that the Truman-Hobbs funding be transferred to the Highway Trust Fund. I understand in the proposal the Coast Guard would still make the Truman-Hobbs determinations, but the funding would come from the trust fund. Most of the bridges we are talking about are railroad bridges. Bayou Canot was a railroad bridge, Judge Seeber was both railroad and auto traffic.

Recently, Bayou Bluff Bridge, which was hit in my district, and by the way, in which the bridge operator promptly notified the railroad and stopped a trainload of citizens who might have been in trouble on that bridge had they not been notified properly. It worked right in that case, but these are all railroad bridges. Can you tell us how that determination of eligibility and how the funding will work in terms of assisting in the rebuilding for safety purposes railroad bridges?

Perhaps Admiral Henn can help us here.

Secretary PEÑA. Admiral, feel free.

Admiral HENN. Certainly. The way we would see this is as we are already doing with the two bridges right now, the design work would be done and as funding comes along, the actual alterations would be made. We have identified, as the Secretary pointed out, nine bridges that are—have some progress under way and then an additional 52 bridges that we need to investigate and do something with them.

Mr. TAUZIN. I mean, for example, the folks in New Orleans who watched this tragedy on the Judge Seeber Bridge heard the news about the changing administration policy on Truman-Hobbs and immediately got worried that there may not be reconstruction of that bridge to make it safer. As you know, in that case, we had

human loss and we continue to have problems with the bridge and vessels trying to go under it and through it.

I guess what I am asking is, how is this system going to work? Is it going to be markedly different from the old system of identifying Truman-Hobbs and funding it or are we going to find it more difficult to get these situations addressed?

Secretary PEÑA. While the Admiral is getting some information, Mr. Chairman, let me say there should not be any significant difference in the outcome. That was not our intention. As I understand it, the two bridges that are under design today—actually under design and near construction today, that funding is secured. For the seven of the nine identified, we are just in the design stages and construction moneys would probably not be needed in 1995.

Admiral HENN. That is correct.

Secretary PEÑA. That is correct. So that was the reasoning of not having the funding in that particular program in 1995, but to at least have the Highway Trust Fund also available in the event that the funds were necessary.

Now, I think for 1996 we have to come back and review this and determine how we are going to proceed in order not to provide a discontinuity of funding once construction begins for the other seven that are under design today.

Mr. TAUZIN. As you know, our committee has engaged with the Coast Guard in an effort to ensure that that program is a nonpolitical program, that it actually serves to identify the most hazardous circumstances in the inland waterway system and then begins to address them and we want to continue to work with you in that regard.

Admiral.

Admiral HENN. Mr. Chairman, the way we see this working is much like it has in the past. For the railroad bridges we would look for the funding to come through the Coast Guard appropriation process.

Mr. TAUZIN. So the railroad would still come through the Coast Guard appropriations. Highway bridges would come through the Highway Trust Fund.

Admiral HENN. That is right.

Mr. TAUZIN. That may mean difficulty for you. As you know, we have a great tension between the appropriators when it comes to appropriating to the Coast Guard or appropriating moneys to transportation functions and I hope, Secretary Peña, you will be aware of that and helpful to us when we try to correct some of these very dangerous situations around the country.

We have all agreed that there ought to be radar on board these vessels, that the absence of radar at Bayou Canot, the absence of the ability to read a radar, I think, in that case may have been a problem. We have been told by members in the industry that it may not be sufficient just to require radar, that quality of the radar is going to be extremely important, that lesser powered radar systems cannot see through fog sufficiently and they might not be able to identify structures sufficiently and that confusion can reign, as it did in that case in Bayou Canot.

Recently, there was a collision between a towing vessel and ferry in New Orleans in which we had a number of injuries but no deaths, thank God, but again that was a heavy fog condition in the river. On the same day, another towing vessel hit the Huey P. Long Bridge named after the famous character, and it came to our attention that merely requiring radar, even requiring operators be sufficiently instructed to read them may not be enough.

Have you looked into that and is that going to be part of our review here?

Admiral HENN. Mr. Chairman, we certainly support your legislative proposal for radars on towing vessels. We would hope that the Congress would give the Coast Guard the flexibility to establish the standards for the radars to insure that we have the proper type of radar on these vessels, and if we have that flexibility, sir, we will establish those.

Mr. TAUZIN. We want to look at the language of our legislation to make sure that it will do the job.

And finally, Mr. Secretary, there is enormous interest and controversy brewing in the river system today in regards to a new issue, a new introduction of a new type of vessel called the gaming vessel. Louisiana is deliberating with them right now and they are coming out of the seams.

Apparently, because of a political judgment that we should have only one land-based casino, the State has made the decision to authorize gambling ships. They are under construction. They are being licensed. The Coast Guard in our district and in other regions on the river system is having to assist in recommending sites for docking and launching and routes for traversing gaming tours, and there is a push to make them sail because that legally, I guess, satisfies the distinction between a land-based casino and a dock-side gambling casino, but the great concern expressed at hearings we have conducted in the Baton Rouge recently was that this was a very dangerous situation.

It places citizens of our country who want to participate in gaming activities, the results of which may indeed endanger the lives of many citizens, and while we are looking at inland waterway systems and towing vessel safety, this is an ancillary issue we cannot ignore and it is one that, as I said, has attracted a lot of attention. And in testimony received in Baton Rouge, Louisiana, Coast Guard officials indicated to us in testimony for the record that every 17 days a major foreign flag vessel will lose steerage or power in the Mississippi River. The specter of something like that, something when a gaming ship filled with thousands of reveling, drinking gamblers is rather frightening.

You know, it seems that while they are gambling for their shirts and their pocketbook, they ought not be taking a risk on their lives, but nevertheless we see that happening.

I call it to your attention only because as we examine this tug-boat and towing vessel safety issue, we have States enacting laws that are going to complicate the safety of our waterway systems and I wondered if either of you had any thoughts or suggestions for us as we proceed to look at that. We will be in New Orleans later this year to follow up on that earlier hearing.

Secretary PEÑA. Mr. Chairman, we are concerned about it. We have had some discussions about what approach we should take. Obviously, this one is also fraught with many difficult issues, not to say that the political issues are involved, too. However, we are very much focused on the safety issue. Let me have the Admiral share some preliminary thoughts on this issue.

Mr. TAUZIN. Thanks.

Admiral HENN. Thank you, Mr. Chairman. There are actually several things that come into play here. First of all, I think it clearly shows that with the number of gambling boats out there, particularly on the Mississippi, and with the amount of traffic from towing vessels, we need to look at increasing not only the capabilities of the vessel itself, but also the capabilities of those who operate those vessels.

With regard, though, to the gambling vessels themselves, the Coast Guard has set additional requirements for these large gambling vessels on the prevention side as far as structural fire protection, as far as a means of escape, but they—the part that still needs to be looked at is the inland search and rescue, what do you do if there is a collision with the gambling vessel, either a foreign tanker coming in or a U.S. towing vessel with a large tow.

The Commander of the Second Coast Guard District in St. Louis, along with our commander of the Atlantic Area have sent letters to headquarters with documentation saying this issue needs to be looked at and they need headquarters policy on this.

Within Coast Guard headquarters, our Operations Coordinating Council, which myself and Admiral Ecker are both members of, have been directed to put together a natural working group. That working group has been formed. It is meeting to look at the whole picture of what is needed in inland waterways. So we are working that issue, sir, and we will be able to report to you on that some time later.

The other point, though, about every 17 days a foreign vessel having some sort of a mechanical malfunction—basically losing power and becoming an obstacle, a threat in the river. Obviously, our initiative within Maritime Regulatory Reform, which is a piece of the Department, the Secretary's Maritime Policy Reform, is looking to focus more emphasis on the foreign vessels to even enhance our present Port State control efforts. We are going to do that by putting more focus on the foreign operators and keeping our focus on the U.S. operators at an adequate level, but somewhat reduced from what it is now, sir, so we are moving in that area. I think we will be successful in that.

Mr. TAUZIN. Thank you very much. I point out, you are absolutely right, it was pointed out that there is no vessel stationed anywhere near Baton Rouge and yet we are going to have gaming activities right there in the river, so I thank you and encourage you to look at that serious issue because it came up again at our hearings.

Secretary Peña, I am going to pass on to other Members, but I don't want to leave without joining the Chairman in expressing to you our sincere appreciation to you for your service in this administration already. We have been pleased with the Transportation Department and delighted that our Coast Guard is properly ref-

erenced and delighted that you are able to help and see to it that they remain a vital part of this Nation's safety efforts in the inland waterways.

I now recognize the Ranking Minority Member, Mr. Coble.

Mr. COBLE. Thank you, Mr. Chairman. Mr. Secretary, I think you came close to answering this, but I want to go through it one more time. Is it your opinion that the current manning, inspection and licensing requirements for inland towing vessels are sufficient for the safe operation of these vessels? And I believe, having read your statement very hurriedly, that you would like to direct additional study and attention to that. Is that correct?

Secretary PEÑA. That is correct, Congressman. We believe that it has been some time, many years, since we have done a comprehensive review of this entire area, and without indicating any prejudgment about it, we think it would be appropriate to do a comprehensive analytical study so we can come back to you and say we have now updated our thinking. We have looked at new technology which is available now. We have looked at the changing nature of the industry, all those differences which did not exist decades ago, to come back to you and give you our best thinking on whether there should be any changes or not.

Mr. COBLE. And that is not unreasonable by any means. Do you have any sort of timeframe when you might get back to us?

Secretary PEÑA. Yes, we do, Congressman, and again, we have a number of target dates for all of the efforts we have underway, both the administrative and others, and again, we will be happy to send those to you. Let me see if we can—it is a long list—get you a sense of when this effort will be completed. We are looking at the June, July of 1994 to look at the marine radar system. That is the charts.

No. You are asking about the manning.

Mr. COBLE. Manning, inspection and all.

Secretary PEÑA. Let me get back to you on that, Congressman and give you a specific date. I am very focused on meeting our targets. That is a longer study and we need to—

Mr. COBLE. That is fine.

[The information follows:]

#### COAST GUARD INITIATING RULEMAKINGS

The Coast Guard is considering initiating rulemakings (1) to require navigation equipment and the training to operate this equipment on uninspected towing vessels, (2) to clearly define what a hazardous condition is and require notification of hazardous conditions and bridge allisions, and (3) to further upgrade the qualifications and training of the Operator of Uninspected Towing Vessels.

Mr. COBLE. Admiral, I read recently, eight or nine weeks ago probably, that the Coast Guard had asked, and that was the word in the publication, asked CSX to install warning lights on the bridge where the Sunset Limited accident occurred. Now, I realize the Coast Guard does not daily or even perhaps frequently extend your regulatory powers to extend to regulating over a rail structure that crosses a nonnavigable waterway. So having said all that, let me ask you a three- or four-part question.

Number one, is it correct that the Coast Guard did, in fact, request that CSX install this warning light? Has CSX complied with the request? Number three, does the Coast Guard have the author-

ity to require warning lights over nonnavigable waterways? And, finally, does the Coast Guard plan to extend this request that warning systems be installed on other nonnavigable waterway bridges?

Admiral HENN. With regard to the first part of your question, did we direct the CSX to install the lights? Yes, we did, on the 30th of November. With regard to have they done it, I do not know, sir, but we will get that answer and supply that to you.

[The following was received:]

#### WARNING SIGN INSTALLED

The Coast Guard has installed a warning sign at the downstream end of the Bayou where it meets the Mobile River. The Coast Guard has directed CSX to light the bridge to indicate there is no commercially navigable channel. This permanent lighting, on the downstream side of the bridge, must be installed and fully operational not later than April 30, 1994, by direction of the Coast Guard District Commander.

Admiral HENN. With regard to that particular location, actually that is a navigable water and any time there is a navigable water, the Coast Guard has jurisdiction there.

What do we intend to do in the future, sir? I think we will treat each bridge on a case-by-case basis. As the Secretary pointed out, we have directed the field by the end of this summer to have looked at each of the bridges in their jurisdiction and to make a determination if there are additional things, whether it be lighting, fendering, buoys located on the approaches, whatever, to identify those and then we will go from there, sir.

Mr. COBLE. Thank you. Admiral, let me ask you this.

Mr. TAUZIN. Would the gentleman yield just a second? Let me ask all Members, if they have questions for the admiral to hold those. We will come back and do those. The Secretary has to leave at about 11 o'clock, so if you have questions for the Secretary, I want to give everybody a chance at least to ask one question, Mr. Coble.

Mr. COBLE. I will hold off until subsequently.

Mr. TAUZIN. Then, if any of you have questions to the Secretary, we will ask you to direct those to him at this time. I will go to you now to, Mr. Barlow.

Mr. BARLOW. No questions of the Secretary at this time. Thank you.

Mr. TAUZIN. Mr. King.

Mr. KING. Mr. Chairman, Mr. Secretary, I want to welcome you. I also want to join with the other Members in commending you for your testimony today and the cooperation you have given to this committee. Mr. Chairman, if I may, however, I would like to take advantage of this opportunity. It will just take me several moments to ask you a question which is of great significance, not just to my district, but to the 10 million residents in downstate New York. This involves the FAA.

The reason I bring it up today is we have not been able to make contact with you or with your office on this. As you know, I am referring to what has been referred to in our area as the air war between the State of New Jersey and the State of New York, which was instigated by the senior Senator from New Jersey. And basically this refers to a proposal which is before the FAA to reroute 540 planes from Newark airport over New York.

On January 25th, 18 other Members of this body, plus Senator Moynihan and Senator D'Amato sent you a letter on this and it is very important to us to know exactly what the status of this is. I put all the cards on the table. We know that the senior Senator from New Jersey is Chairman of the Appropriations Subcommittee on Transportation. I would just add to that, that the Senator from New York, Mr. D'Amato lives in a community where these planes will be flying over if this is approved. So you can take your pick as to who you want to antagonize the most here.

Also, Senator D'Amato is a constituent of mine so I have an interest. I think you can identify with my situation here. Again, I want to take this opportunity to ask you, Mr. Secretary, we did ask for a response by February 15. I realize you have thousands of letters cross your desk.

Secretary PEÑA. This is an important one, Mr. Congressman. I am very much aware of the letter and the great interest here. And as you know, I have spent a considerable amount of time on this issue, and we will be responding to your letter very shortly. Mr. Henson is near finalization of the draft.

Let me just say, although it is not related to today's hearing, in my former position, when I was mayor of Denver, I had to deal with a lot of noise issues. I am very much aware of the noise concerns and how they affect different communities, and then the balancing act that airport operators and communities and local governments have to play in trying to deal with people's concerns.

And that is why this issue is so complicated, you know, and we will, bottom line, respond to you very quickly.

Mr. KING. Thank you. It is important. We currently have a thousand flights overhead. There are going to be another 540, which would likely contribute to our tremendous air pollution problems. I appreciate your tolerance. This is very important to me and my district and also to the Junior Senator. Thank you very much.

Mr. TAUZIN. Good job.

Ms. Lambert.

#### **STATEMENT OF HON. BLANCHE M. LAMBERT, A U.S. REPRESENTATIVE FROM ARKANSAS**

Ms. LAMBERT. Thank you, Mr. Chairman. I, too, join Chairman Tauzin and Chairman Studts in welcoming both of you and thanking you for the tremendous job you have done. It has been wonderful to work with the Department of Transportation. You all have been very responsive in the many needs that my office has brought to you and I appreciate the fine job that you are doing. And I also welcome Admiral Henn.

I have one quick question. I noted in your testimony and your response when you talk about the five emphasis areas that you would like to work on this is very important for me and my district. I know last week we had a barge that hit in Memphis, so we do see these instances not nearly as major obviously as Congressman Tauzin's, but frequently.

I do cover the whole eastern half of Arkansas, which comes along the Mississippi and we are pleased with the response that we get from the Coast Guard and others. When you talk about developing more stringent licensing requirements for operators and the

uninspected towing vessels, is there perhaps the need for ground schooling. I know that they are required to have three year's qualified experience and other things in the licensing process.

Does that entail any ground schooling or any prep courses or anything like that? And would that be something that we might want to look into?

Secretary PEÑA. The whole area we want to explore. As respects the current requirement, let me ask the Admiral to talk about it.

Admiral HENN. There is no ground schooling as far as the use of simulators, showing your abilities to handle a vessel or whatever. The only ground schooling that is required is basic things like CPR, firefighting, first aid. What we see for the future is that there is a need for things like ground school, a need to use simulators. We believe simulators are coming into their own. Indeed, we have a study that is almost completed with the Marine Board showing the viability of using simulators for training and also for testing, which is, I think, just as important.

So, those are areas, as the Secretary said, that we are going to move into. They are areas where the timing is right. Ten years ago, we couldn't do it. Today, we are ready to do it.

Ms. LAMBERT. Are there any such schools currently that provide any type of—excuse the pun—crash courses?

Admiral HENN. Yes, there are. All the way from ground schools to teach you how to pass a Coast Guard licensing examination to schools to teach you how to get your radar certificate, either to pass a Coast Guard radar examination or to get a certificate that the Coast Guard will accept because they are accredited to do that type of work.

Ms. LAMBERT. Are they Coast Guard schools?

Admiral HENN. No, these are not Coast Guard schools. These are private sector schools, but they are accredited by the Coast Guard to do that type of work. There is a regime out there in place. We intend to build on that.

Ms. LAMBERT. We had in previous years the National River Boat Academy in my hometown, which produced a number of excellent river boat navigators. I traveled on boats with many of them. And it was a school that I think produced some good navigators for the river and the inland waterways. The problems that it had were administrative and I think some of the community colleges have been working with Secretary Reich to help provide for administrative umbrellas for some such schools to be able to provide in that area. Thank you very much.

Mr. TAUZIN. Thank you, Ms. Lambert.

Mr. Gilcrest.

Mr. GILCREST. Thank you, Mr. Chairman. Thank you for coming, Secretary Peña and Admiral Henn. One question and one comment. The Chesapeake Bay relies heavily on the Coast Guard for safety, for protection, for a lot of things. And basically the Coast Guard does an excellent job. They also rely upon the Corps of Engineers to do a lot of dredging to keep the coastal waterways for the commercial watermen and marinas productive and active. I am just curious, in your opinion, Mr. Secretary, how well in your mind does the Coast Guard and the Corps of Engineers coordinate as far as

compiling information concerning oil spills or spills of other types of chemicals?

As we begin to gather information about the, luckily, small oil spills that have occurred in the Chesapeake Bay, and they are numerous, and the fact that dredging needs to occur in a variety of places, there may be—and we haven't really delved into this too much, and I am hoping there is a great deal of understanding and communication as to how much oil is transported by barge, by tanker.

How much is there of it, and where are the spills and is there regular communication between the Coast Guard and the Corps of Engineers?

Secretary PEÑA. Congressman, there is now. And let me explain why. We have started an interdepartmental effort on the question of dredging. It hasn't been done in years. And we think that given the number of concerns and questions raised about it, we believe that it is now time to refocus on that. So we have all of the key departments which have been working on it for some time to look at the entire dredging question as a government-wide effort so that you don't have the Corps of Engineers saying one thing, EPA saying something else, DOT here.

Mr. GILCHREST. Fish and Wildlife.

Secretary PEÑA. Exactly. That work is proceeding very well. And they are now, if they hadn't been in the past, they are now in the same room sharing the same information such as the information that you have talked about, but we will make sure that is a note that is to be passed on.

Mr. GILCHREST. And the number of ships that come from foreign ports that come into the bay, who monitors that? And who monitors the domestic barges that come into the bay and the various tributaries of the C&D canal? I am not sure that is done right now.

Secretary PEÑA. All the particular factors that you are concerned about, please send those to us and I will make sure that they are placed before that interdepartmental group and make sure that they are shared among those departments.

Mr. GILCHREST. My last comment is, I suppose if there is any single act that can improve the safety of the Chesapeake Bay, in my opinion, it is to allow Maryland State licensed pilots—and I agree with the provisions that are in the bay and this requires maps and charts and pathfinders and things like that, but a Maryland State licensed pilot can now board a foreign flag vessel and guide that person up the bay, but it can't board a domestic vessel, either tanker or a barge or things like that.

And I know this is going to tighten up the barge system and the tugs and the tow vessels and whatever, but just a thought that I would think that a Maryland State licensed pilot, given the shallowness of the bay, given the horrendous problem, if you not only spill the oil, but if you spill the liquid sugar in tributaries that are not real rivers but tidal basins and have very little flow capacity to cleanse themselves, especially in this estuary area, I would like the regulation that exempts State law in this area to be looked into and reviewed again.

Secretary PEÑA. Let me have the Admiral respond to that, Congressman.

Admiral HENN. Yes, sir, we have a study. It is almost completed and we expect it to be delivered to us in June from the Marine Board. It is a pilotage study. We are not totally pleased with pilotage as it exists around the United States today. We think there is room for improvement. And this particular aspect is included in it, what is needed with regard to the towing industry. That is one facet of the study, so we are looking forward to getting that.

You are absolutely right that a U.S. vessel that is documented for foreign trade and a foreign vessel coming into our ports, those are vessels that are required by law to take a State pilot when they come into State waters. A coastwise U.S. vessel can operate with a U.S. pilot and normally that is an endorsement on the master's license, the U.S. master.

With regard to inland towing, they are not required to have pilots except for on coastwise seagoing tank barges. But this is an area that needs to be looked at, and indeed, this study, which has taken over two years to complete, and we think will be a major milestone, we will look and see what is proposed there.

Mr. GILCHREST. One last quick 15 seconds. We don't have green lights here; it is really pleasant to come here. I don't want to over-use the tragedy of the Valdez, but if there had been an Alaska State pilot on board that vessel, I don't think that would have happened. Thank you.

Mr. TAUZIN. Mr. Stupak.

Mr. STUPAK. Thank you, Mr. Secretary, and, admiral, for being here. You have mentioned the comprehensive review that is being undertaken in this area. The part that bothers me and maybe I am not clear about the definition and I would ask that you review, is that the Amtrak accident happened in what we call nonnavigable waters, and yet you have commercial vessels moving goods in non-navigable waters.

Whose jurisdiction does it fall under and what kind of enforcement rights do you have under the definition of nonnavigable? Do we have to change some definitions? Do we have to expand navigable versus nonnavigable waters? I know it is a complex thing and may be opening a Pandora's box. But it is confusing because everybody knew there was commercial traffic in this area.

I think the tugboat operator said that he thought there was another vessel that he was going to tie up next to. Who has jurisdiction? Who has the enforcement power? Who has the legal right to be there? Really, I hope you address that in your review.

Secretary PEÑA. Congressman, that is an excellent question, and as we know, this was a bridge which at one time was operational and then secured permanently, and then legally classified by Congress here, admiral, as nonnavigable in a sense that there was not supposed to be usage of the river, but in effect it was still practically and physically able to be navigated. And therein gets the confusion that you have raised about legal definitions and practical application.

And that has caused us not only to review this, but the whole issue of the lighting system, the fencing system, et cetera, because certain decisions were made years ago about fencing that particular bridge. And I asked the question when I arrived on scene, it is now time to review this question because even though it is technically

unnavigable, you can still traverse it so we have to analyze those issues also.

You raise a good question.

Mr. STUPAK. Thank you.

Mr. TAUZIN. Thank you, Mr. Stupak. Again, let me thank you, Secretary Peña, and you, Admiral. I know that we have run a little late and I apologize. I am particularly concerned that we get this business done as quickly as we can and we don't complicate it with the controversial issues that are still outstanding until we have resolved them.

In that regard I am asking staff to set the markup date as expeditiously as possible. It may be as early as the end of this month. And I would urge, if you could assign someone from your office, and, Admiral Henn, someone from your staff to work with our committee and the industry, we are going to obviously have to redraft the bill in certain key aspects.

The recommendations for new penalties on failure to report is a good one and maybe others. We want to move it rapidly so I think we are can meet what is your excellent idea for setting the target date for putting it on the President's desk in September. And I would urge you to assign someone to help us in the new redraft.

When we do it, if it is in March or early April, we would appreciate very specific recommendations, if you have any, for changes in the language itself by that time. Mr. Secretary, and Admiral Henn, thank you very much. We know that you have to leave, Mr. Secretary, and we deeply appreciate your personal attention to this issue.

Secretary PEÑA. Thank you. I want to congratulate you and Members of the subcommittee for your leadership on this subject. We will get you those timetables so that you will know what our schedule is on this and anything that we can do to speed it along, we will do so.

Mr. TAUZIN. Admiral, you may want to stay just a second? The Chair recognizes Mr. Coble for additional questions.

Mr. COBLE. Thank you, Mr. Chairman. Admiral, Mr. Stupak picked up on my question. Let me go back to that to plow that field one more time as to what constitutes navigable and nonnavigable. I guess the law books are filled with that, subject to legal interpretation. Let me put the question to you again, admiral, that I initially asked regarding the Coast Guard's authority to extend its regulatory arm to a rail structure or a nonnavigable or a navigable waterway.

I presume on the latter that the Coast Guard would have that authority over a navigable waterway; correct?

Admiral HENN. Yes, sir.

Mr. COBLE. How about a nonnavigable waterway?

Admiral HENN. I don't know, sir. I think in this instance in Mobile was a navigable waterway. A waterway that you can float a canoe in is navigable.

[The following was received:]

#### NAVIGABLE WATERS DEFINED

33 CFR §2.05-25 defines navigable waters as: (1) Territorial seas of the United States; (2) Internal waters of the United States that are subject to tidal influence that; (i) are or have been susceptible for use, by themselves or in connection with

other waters, as highways for substantial interstate or foreign commerce, notwithstanding natural or man-made obstructions that require portage, or (ii) a governmental or non-governmental body, having expertise in waterway improvement, determines to be capable of improvement at a reasonable cost (a favorable balance between cost and need) to provide, by themselves or in connection with other waters, highways for substantial interstate or foreign commerce.

33 CFR § 2.10-10 states that inquiries regarding the status of Coast Guard jurisdiction over specific waters should be directed to the Coast Guard District Commander within whose purview the waters lie.

Mr. COBLE. What about the CSX compliance? Has, in fact, a warning being installed?

Admiral HENN. We have directed as of 30 November that they install lights. I don't know if they have been installed, and we will get back to you on that.

[The following was received:]

#### WARNING SIGN INSTALLED

The Coast Guard has installed a warning sign at the downstream end of the Bayou where it meets the Mobile River. The Coast Guard has directed CSX to light the bridge to indicate there is no commercially navigable channel. This permanent lighting, on the downstream side of the bridge, must be installed and fully operational not later than April 30, 1994, by direction of the Coast Guard District Commander.

Mr. COBLE. I would like to know that. Mr. Chairman, if I may, two more quick questions, Admiral. Our bill 3282, provides for inland towing vessels to have aboard certain types of navigational equipment and publications. I am sure you are familiar with that. If you had your druthers, would you like to add to or delete from that list?

Admiral HENN. I would not want to add or delete from the list, sir. And let me tell you why. I think the equipment shown there is a basic set of equipment that the general operator needs to navigate his vessel safely. I think with regard to the fathomer, we in the Coast Guard would prefer some flexibility as to defining the areas where a fathomer is absolutely needed.

I think there are some areas where it is probably not needed. With regard to as you move up the line to a magnetic compass, that is good anywhere, regardless of whether it is a river system or not. I know that people say that we are not navigating by magnetic compasses, we are looking at ranges. That is true, but when you are in low lying areas where you do not have good radar reception, particularly in fog or at night, and you don't have a good image of the outline of the river, certainly the magnetic compass gives you some idea of whether you are steering north or whether you are steering northeast. And, obviously, that is a very important thing to know, and in many cases when you have tributaries coming in it will prevent you from doing something like steering up the wrong tributary and into a railroad bridge.

Mr. COBLE. It would certainly serve as no detriment. Admiral, someone mentioned about the oil spill in Puerto Rico. In passing, can you give us the approximate cost of the cleanup and would there be anything that we could add in H.R. 3282 which would have helped prevent such a spill, again applying 20/20 hindsight?

Admiral HENN. The last figure I had, sir, was that the company had reached the \$10 million limit of their insurance. That money was spent. The Coast Guard, in cleanup, had expended somewhere

in the order of around \$30 million. And then there were going to be third-party claims coming in which might run it up to the magnitude of \$50 million.

We could get you the precise numbers, but that is the general ball park. We will come back to you with those.

[The following was submitted:]

#### CLEANUP COST IN PUERTO RICO OIL SPILL

As of March 11, 1994, total estimated cost to complete removal is \$75 million. Total estimated claims are \$25 million.

Mr. TAUZIN. Thank you much, Admiral. We are going to have to recess. There is a Floor vote. We will take a 15-minute recess and then reconvene the second panel. Thank you, Admiral. The Nation is the winner here. Thank you, sir. We will be in recess.

[Recess.]

Mr. TAUZIN. The hearing will please come to order.

We have some more time constraints. We are being asked to vacate this room by 12:30. So we are going to put the lights on and try to abide by the five-minute rule. The written testimony of all our witnesses, by unanimous consent, is already made a part of the record. And the record is automatically kept open for two weeks for additional statements or submissions. So you need not read your testimony.

We would be more interested in the summation or the summary. And we want to reserve time to discuss with you some of the points you made. We are pleased to welcome the first witness on our second panel, Mr. Thomas Allegretti, the President of American Waterway Operators, Mr. Allegretti.

#### STATEMENT OF THOMAS A. ALLEGRETTI, PRESIDENT, AMERICAN WATERWAYS OPERATORS

Mr. ALLEGRETTI. Thank you, Mr. Chairman. Good morning, Mr. Chairman and Members of the subcommittee. Thank you for the opportunity to be here with you today. We appreciate being able to share with you our views on how to enhance navigation safety in the inland towing business.

We have provided you with detailed testimony which addresses the specific provisions of H.R. 3282. We recommend some modifications to that bill. We also call for its strengthening in certain respects. In the interest of time, I will highlight the most important parts of our testimony.

The first point that I want to make to you is that I think there has been considerable progress made since this subcommittee met in October; a series of positive things have happened in terms of industry-government partnership, new areas of inquiry and new ways of looking at safety. Those are detailed in my testimony.

Now, we think the time has come to act. We believe that joint government and industry action is needed in order to effect the changes that are necessary to move us closer to the goal of enhanced navigation safety. We have two things in mind.

First, we strongly urge the subcommittee, the full committee and the House to quickly enact H.R. 3282.

Most vessels in the towing industry have long utilized and have long recognized the value of the equipment that that bill seeks to

require. Our testimony expands on this point. We make the point to you that the towing industry is hardly a monolith and that given the diversity of its operations, it is important to provide some flexibility to the Coast Guard about where certain types of navigation equipment are required.

Navigation equipment that may have great utility on one vessel, may have limited utility on another. And we think that the Coast Guard has the expertise to make some of those detailed decisions.

The second area that we recommend to you with respect to action is that the Department of Transportation, through the Coast Guard, working in consultation and with the support of industry through the Towing Safety Advisory Committee, should move forward to implement the 19 recommendations contained in the Secretary's December 10 report to the Congress.

We believe that they constitute a sound framework for change on the most important safety issues that are attendant to the operation of towing vessels. I mentioned in my testimony that AWO has established a review group of its own where we looked at the same kinds of issues that the Department looked at in its evaluation. There is close alignment between—in the direction and in the content of—the recommendations that emerged from the internal AWO analysis with that which emerged from the Secretary's analysis conducted at the Coast Guard.

I think that tells us two things right off the bat. The first is that we have focused on the right solutions since both of these bodies independently came to the same conclusion drawing on the expertise of navigators. The second thing is that filling in the details of these solutions and establishing standards which implement these improvements should move forward without delay and without significant controversy.

There is no reason that we should not be able to see the fruits of that labor in very short order. I think that the development of these recommendations will be substantially facilitated by the involvement of the Towing Safety Advisory Committee.

As you know, Mr. Chairman, that Advisory Committee to the Secretary is congressionally-authorized and was indeed originally established through legislation that began in this subcommittee more than a decade ago. It draws heavily on not only the navigation expertise of the towing industry but provides balance by bringing in labor, shippers, terminal operators and public representatives to ensure a complete point of view.

I noted with interest the Secretary's remarks about moving forward on these things. We could not agree with him more—that the right thing to do is enact 3282, move forward to implement all of the provisions in his recommendations to you that can be implemented administratively, and to do that quickly and without hesitation.

And one last point, I am speculating a bit with you about where that process may lead. If the partnership between industry and government comes about as I think it should, we are going to see substantial improvements in the most important area of safety. And that is with respect to the competency and proficiency of towing vessel operators. I think that we are going to plow some new

ground that will eventually find its way into the competency and proficiency issues of all mariners, not just towing vessel operators.

I will be happy to answer any questions that you may have.

[The statement of Mr. Allegretti may be found at end of hearing.]

Mr. TAUZIN. Thank you very much.

I want to join with the Secretary and other members who have expressed a great deal of appreciation to the industry for being willing to be partners in the solution. And we have seen nothing but cooperation from day one in our efforts, and I want to thank you for that.

#### **STATEMENT OF JOHN SUTTON, PRESIDENT, AMERICAN INLAND MARINERS**

Mr. TAUZIN. We are now pleased to have here, Mr. John Sutton, President of the American Inland Mariners.

Mr. SUTTON. Thank you, Mr. Chairman.

I would ask that you excuse my public speaking skills.

I am a licensed mariner. American Inland Mariners Association would like to take this opportunity to thank the subcommittee for recognizing our association and the mariners we represent.

We would also like to thank the sponsors of H.R. 3283 for responding to the void in the regulations regarding minimal navigational safety equipment on uninspected towing vessels. While we generally support H.R. 3282, we have made several recommendations to the subcommittee with regard to this bill.

We feel that our recommendations may more accurately reflect the needs of the uninspected towing vessel and the mariner who works on these vessels. The seven specific recommendations that I have made in my official statement, to improve the overall safety of our Nation's waterways from a mariner's point of view, I would like to place great emphasis on the United States Coast Guard identifying those bridges on our Nation's waterways that pose navigational hazard. And also to improve aids to navigation on and near these bridges.

I personally believe that each of these goals are attainable without placing excessive strain on the United States Coast Guard's budget. As the United States Coast Guard and licensed master and pilot of one of the last uninspected towing vessels on the Mississippi River, I feel that I will be able to answer any technical questions that this subcommittee may possibly have.

Mr. Chairman, also in the conclusion of my official statement, I have placed a list of five towing companies that have extended the offer to any of the committee Members or staff members to ride their vessels in an observation capacity to observe the inner-workings of an inland towboat vessel and, hopefully, enlighten this panel with regard to the daily working routine of these mariners.

Again, Mr. Chairman, I would like to thank you and your personal staff for assisting me through these proceedings. And I would be happy to answer any questions that the panel might have.

Mr. TAUZIN. John, thanks. It is always good to have some home folks here. And I also want to thank you for the suggestions. And I hope when we get into the issues of licensing and manning and inspections that we do actually examine the industry up close and personal, rather than relying strictly upon what we may hear from

representative groups here in Washington. And we are going to take that to heart very much.

[The statement of Mr. Sutton may be found at end of hearing.]

**STATEMENT OF ANN POWERS, CHESAPEAKE BAY FOUNDATION, REPRESENTING WILLIAM SCHRENK, SENIOR CONSULTING ATTORNEY, NATURAL RESOURCES DEFENSE COUNCIL, INCORPORATED**

Mr. TAUZIN. Mr. William Schrenk, Natural Resources Defense Council, Inc., was delayed by weather in New York. No surprise. Ann Powers of the Chesapeake Bay Foundation is here to give his testimony.

Ann, we welcome you and would welcome your summation.

Ms. POWERS. Thank you, Mr. Chairman and committee Members. I do extend apologies from Mr. Schrenk, it was pretty much unavoidable.

As you know, the Natural Resource Defense Council has been active for a long time in oil transportation safety issues. They have published two major reports, "No Safe Harbor" in 1990, and "Safety at Bay" in 1992. Likewise, the Chesapeake Bay Foundation has long taken an interest in oil transportation safety issues.

Back in 1976, we put out a report called, "The Bay on Borrowed Time." Ironically, only a few months after that a major oil spill, just as was predicted in our report, occurred. In 1990, we published another report called, "Preventing Catastrophe," and we are now working on a third report which will be issued very shortly. One of the reasons that we are here this morning is because much of the traffic that is on the Chesapeake Bay and on our inland waterways is tug and barge traffic.

Most of the millions and millions of gallons of oil that are transported on the Chesapeake Bay are transported by tug vessels towing barges.

Many of these barges contain up to a million gallons of oil. We have been quite fortunate on the Chesapeake that we have not yet experienced an incident like the Valdez, although we have had two major spills in the last 10 years or so. Both of those involved barges that were being towed by tug vessels.

In 1976, the first of these major spills, the captain of the tugboat towed the barge across a shoal in bad weather. He had insufficient navigational equipment. They were not even aware that they had grounded the tug for quite some time.

It spilled a quarter of a million gallons into the marshes of the Chesapeake Bay. In 1988, a similar accident in a similar location occurred. In that instance, the barge was being towed in relatively mild weather.

We did have some wind and seas, but they are not uncommon on the Chesapeake. But the barge that had been inspected just a few months previously by the Coast Guard, basically split in half. The operator of the tugboat was not aware of that for, it appears, several hours until notified by a passing vessel. And these are the types of incidents that we basically dread on the Chesapeake Bay.

The bay is also not immune from accidents involving barges and obstacles such as bridges. We are told by the Coast Guard that in the last 10 years, there have been 26 bridge allisions on the bay.

At least 11 of them were due to some type of operator error. And indeed, there is one investigation currently underway involving a barge which hit the Route 313 bridge on the Nanticoke River, in Mr. Gilchrest's district, I might add.

Fortunately, it doesn't appear that there was serious damage. But these are the kinds of incidents that can threaten an estuary like the Chesapeake, which is exceedingly sensitive. It is a shallow estuary, very rich in marine life. We know that the damage there from any kind of major spill could be extensive.

Likewise, around the country we have seen similar problems. Both the Natural Resources Defense Council and the Chesapeake Bay Foundation support the bill being presented H.R. 3282. We think it makes great strides in addressing the problems that are of concern to us.

In our testimony, we have pointed out several areas, however, where we think that it could be strengthened. Those include inspections. We believe that the tug vessel should be subject to greater inspection requirements. We are told that at the present time all but two vessels would be exempt from inspection.

A second point would be to treat the towboat and their tank vessels as tankers, in all respects, subject to inspections, equipment and manning standards. We support more stringent licensing and training requirements.

I would echo what Mr. Gilchrest had to say about the need for training and perhaps even for State pilots. We have a very good piloting system on the Chesapeake Bay.

And finally, I would like to address the issue of the Towing Safety Advisory Committee. We think that the committee needs to be reconstituted to better reflect the various views of the stakeholders around the country or, if not reconstituted, it should be abolished.

I speak, I think on behalf of not only the people around the Chesapeake Bay but others who live around water bodies that they consider as precious as we do the Chesapeake. We ask you to do everything within your power to make sure that when oil and other products are transported on our bays and water bodies it is done so with a high level of safety.

Thank you very much.

Mr. TAUZIN. Thank you very much.

[The statement of Mr. Schrenk may be found at end of hearing.]

#### **STATEMENT OF H. THOMAS KORNEGAY, EXECUTIVE DIRECTOR, PORT OF HOUSTON AUTHORITY**

Mr. TAUZIN. We will next hear from Mr. Tom Kornegay, Executive Director of the Port of Houston Authority.

Tom, I know that Mr. Fields wanted to be here to welcome you personally, but on his behalf and on behalf of the subcommittee, welcome, sir.

Mr. KORNEGAY. Thank you.

Chairman Tauzin and Members of the subcommittee, I am Tom Kornegay, the Executive Director of the Port of Houston Authority, and I serve as President of the Gulf Ports Association.

Thank you for inviting us to testify regarding a subject of considerable importance to our membership, the critical need to increase safety on our channels.

We would also like to thank you, Mr. Chairman, and Houston's Congressman Fields, for introducing H.R. 3283, we view this legislation as an important step toward ensuring the safety of our Nation's waterways. The membership of the Gulf Ports Association consists of the 26 government entities which own and operate deep-water port facilities on the U.S. Gulf Coast from Tampa to Brownsville, Texas.

The common purpose shared by the GPA ports is expressed in our mission statement:

"To promote the progress in waterborne commerce through U.S. Gulf Ports to provide a forum through which member ports can address mutual concerns; to educate the public and elected officials as to the economic impact of United States Gulf Ports and to provide users of the ports in the Gulf with innovatively managed and environmentally sensitive facilities."

I can say with pride that the commerce and activity of our gulf ports contribute mightily to the Nation's economy and security. We contribute over \$40 million—\$40 billion annually to the Nation's economy. Likewise, the activity of the gulf ports is almost half a million jobs directly and indirectly.

Gulf ports have proven to be vital to defense, providing facilities for mobilization, deployment and supply of the U.S. forces in the time of war, in Operation Desert Shield and Desert Storm, 25 percent of all the U.S. military cargo was handled by three gulf ports.

Naturally, setting and maintaining standards for safe navigation on our channels is critical to the important functions served by the gulf ports and ports all across the Nation. Any time safe passage is impaired, both the flow of commerce and personal safety is threaten.

Ports are keenly aware of that and we are doing our part to ensure safety. For instance, as the result of the passage of the Oil Pollution Act of 1990, gulf ports have worked diligently with State and Federal agencies to develop plans for quick response to spills and accident prevention through safety awareness.

We do our part, but unfortunately we have no control over the vessels that navigate our channels. In the case of tows and barges, we must look to this Congress, and more specifically, to this subcommittee, to do what is necessary to make sure that these vessels operate safely and that pilots who captain them are well trained.

As with other port regions, the gulf ports have experienced serious and life-threatening accidents as a result of ill-equipped vessels and untrained operators navigating our channels. The most devastating example is, of course, the Amtrak accident near Mobile, Alabama. You are well aware of the details of that event.

I would like to draw your attention to other examples of deficient safety measures resulting in loss of life, cargo and commerce in the gulf ports. The Port of Houston is a uniquely narrow channel. The need for properly equipped vessels and adequately skilled and adequately trained piloting is even greater in channels such as the Houston Ship Channel. On December 21, 1992, there were—there was a three-vessel collision caused by a vessel which had not been inspected and didn't have a functioning compass. The Freemont was pushing the barge Duvall II, when it ran off course and struck

the Juraj Dalmatinac. The Freemont sustained \$16,000 in damage, the Duvall II, \$750,000 damage and loss of cargo of \$122,000.

The Juraj Dalmatinac suffered \$67,500 in damage. The Houston Ship Channel was closed for three full days. Fifteen outbound vessels were stuck in port; 50 inbound vessels were anchored in the Gulf of Mexico.

The channel was restricted to one-way traffic from December 25 to the February 17. The cost in loss of wharfage fees was estimated at over \$6 million for the three-day period the channel was closed.

Our neighbors in Freeport experienced a problem in their channel in 1986 when a towboat barge collided with a Monsanto barge dock. This incident occurred in foggy conditions and with a vessel which was lacking proper safety equipment. Brazos pilots and the Port of Freeport have similarly supported a need for legislation requiring each tow to be equipped with a compass, radar, VHF and current charts of areas traversed.

More recently in the summer of 1993, there was the collision in Louisiana by a barge and tow hitting a bridge resulting in the loss of two lives, the mother and her unborn child.

These are only a few examples of the serious nature of the accidents which we believe might be minimized or even avoided with the proper equipment and certification required for barge and tow operators. It is for this reason that the gulf ports support the requirement of navigational safety equipment on all vessels which traverse our channels, and further, we believe that proper training of these individuals piloting vessels is critical.

This Nation's ports are a vital source of support for the economy. Accidents can and should be minimized. Interruptions in normal activity which impedes the flow of commerce through U.S. ports is costly in terms of dollars, in terms of the danger to the environment and most importantly in terms of the dangers posed to human life.

We believe that H.R. 3282 is a positive step to enhance safety and thus minimize the chance of accidents. The gulf ports urge the swift passage of H.R. 3282.

Mr. TAUZIN. Thank you very much, Mr. Kornegay, and we also note your interest in H.R. 3812, which by the way, I am only just becoming familiar with. And we are going to get a copy of it. I think it is the kind of thing that we always would want to support.

[The statement of Mr. Kornegay may be found at end of hearing.]

**STATEMENT OF JEFFREY C. SMITH, EXECUTIVE DIRECTOR,  
COMMITTEE FOR PRIVATE OFFSHORE RESCUE AND TOWING  
(C-PORT)**

Mr. TAUZIN. We are pleased to have Mr. Jeffrey Smith, Executive Director of C-Port Committee for Private Offshore Rescue and Towing.

Mr. SMITH. I am here today to discuss H.R. 3282's impact on firms which provide nonemergency towing to disabled vessels. Being familiar, as I am, with your record, Mr. Chairman, I know that you are aware that government actions sometimes have unintended consequences. And in this case, I would submit the legislation has an impact which I think is no part of the intention of the committee.

This situation occurs because of the way the law is written. Under 46 U.S. Code, the section to which this bill would amend, Section 4102, is written in such a way as it makes no distinction between large commercial towing operations and small assistance towing operations. Whereby the difference is a major difference. Analogies can never fully explain the situation but it is much like the analogy between let's say, a Lear Jet and a large commercial jet. Both are certainly airplanes, but they are regulated very differently by the FAA.

A large commercial vessel as represented well by my colleague here Mr. Allegretti from the American Waterways Operators, tows or pushes a cargo weighing hundreds or thousands of tons. A small assistance towing vessel rescues boaters whose boats weigh less than approximately 8 tons. Unfortunately, this bill would treat both vessels the same.

In uninspected towing vessel of the type that our members at the association represent are basically 17 to 30-foot long vessels that are operated by one or two persons who are licensed under legislation this committee passed approximately 10 years ago.

Basically, we urge the subcommittee to look favorably upon an amendment which would, in effect, exempt some of our small vessels from the provisions of the bill. And the most important provision of the bill is the radar requirement, for example. You would have a good a 22-foot vessel required to carry a radar and have all its crew trained in a radar observer course which costs about \$1,000 a person.

Now, the Coast Guard's own rescue boats, 22-feet long, are not equipped with radar. Generally, few are. The Coast Guard's 41-foot boats are all equipped with radar. So that would be a costly and I believe unnecessary requirement on our industry.

And I should also point out that is the implementation of these equipment requirements not recommended by the DOT's study. None of the 19 recommendations made by DOT included this. Nor was it recommended by any other report.

So in summary, our industry, which was actually created by this committee 11 years ago, was not, I believe, intended to be included in this legislation, so we would urge the committee to look favorably upon an amendment in the upcoming markup that would give consideration to the bill's real intent.

Thank you.

[The statement of Mr. Smith may be found at end of hearing.]

Mr. TAUZIN. Thank you, very much, Mr. Smith.

Mr. Smith, if I can quickly go to you, there is current exemptions in the law that we are amending that provides for exemption for any vessel where the Secretary finds good cause exists for the exemption where the safety of the vessel or persons on board would not be adversely effected. Are those not adequate for your purposes?

Mr. SMITH. Well, I think that would be very problematic because what you would deal with is the local Coast Guard officer in charge making those exemptions on a case-by-case basis. That would put him in the line of fire if in the unlikely circumstance there was an accident, and if I were that officer in charge, I think you would find

that people would be very reluctant to exempt any vessel from the law.

Mr. TAUZIN. And your point is that these rescue vessels don't push barges and that you serve a very special purpose and, therefore, that these requirements may not apply to you; is that it?

Mr. SMITH. Precisely.

Mr. TAUZIN. Let me turn to Ms. Powers. Ms. Powers, you were here, I think, when the Secretary spoke and it is a very important point that I asked him to be specific on because like you, he wants to see us and many of us want to see us move in the direction of reforming the inspection and licensing provisions of the law, specifically to do it in a way that fits the real world out there in regards to the very different kinds of towing vessels and different tows that are on the waterways.

Recognizing, I think Mr. Allegretti will probably want to join in here, there is some controversy as to how those ought to be applied, where they ought to be applied and how deeply the inspections go and how far licensing requirements may go.

The concern I have, and the Secretary seemed to echo is, is that we ought not delay the things we currently have agreement upon while we are watching and working with the Secretary to develop a model for improvements in inspection and licensing.

Do you have any comments on that particular point of view?

Ms. POWERS. Well, Mr. Chairman, we certainly would not want to delay any of the salutary provisions of this bill. However, we think that it would be wise to include all the provisions at this time in this bill to make sure that these issues are covered.

Mr. TAUZIN. Let me turn to Mr. Allegretti. Again, the same subject. I know that your industry and Mr. Sutton, you might want to join in, will be deeply involved in these discussions and, hopefully, as you pointed out, involved actually in a government, business partnership to find the right formula for inspections and licensing, what have you.

Do you feel that that topic is so controversial that it could delay implementation of the improvements we all agree upon and everyone apparently is ready to move on right now?

Mr. ALLEGRETTI. We believe it absolutely would, Mr. Chairman. Our industry has very deep, very grave concerns with the idea of Coast Guard inspection and Coast Guard-prescribed manning scales. These are very complex, very controversial issues. There is not consensus among the parties on them and the decision as to whether or not you move forward on something like that requires very careful analysis.

When we are talking about things like the provisions of H.R. 3282 that deal with equipment or deal with licensing standards, I think that there is consensus that these are very positive directions in which to go and that they get at the root cause of accidents in our industry; and therefore, there is broad support for them in our industry. That same consensus does not exist with respect to manning or inspection.

Mr. TAUZIN. Mr. Coble tried to get some idea from the Secretary as to when he thought he would be prepared to make recommendations in this area and he, of course, was not prepared yet to give us a time date on it. What is your idea? Is it possible that prior

to our goal, which I think the Secretary expressed today, is September for enactment and signing of this bill, is it possible for that consensus to be reached in time for us to add provisions to this bill somewhere in the process or do you think it will take longer than that to reach that consensus?

Mr. ALLEGRETTI. I don't believe that you can reach the consensus by the target date that the Secretary suggested of September 22nd, and I believe that principally because you cannot complete the analysis that is necessary to get all the data on the table that will lead to a sound public policy decision.

Mr. TAUZIN. Mr. Sutton, would you like to join in this? You obviously have some interest here.

Mr. SUTTON. Certainly. I would like to concur with Mr. Allegretti on the fact that I don't think this can be done in a hurried manner. The vessels that plow the inland waters are a diverse group of vessels. They come in all shapes and forms and I would think the inspection of these vessels would—you know, each vessel has its own characteristics and I would think quite a bit of thought would have to go into something like this.

As far as the licensing requirements, absolutely our association believes that at some level, licensing requirements need to have some observation and as a licensed mariner that is actively involved in the industry and—I see things on a daily basis that I feel need to be looked at and I don't think it can be done by the target date.

I think it is going to be something that quite a bit of thought needs to go in. I have had no formal conversation with Mr. Allegretti and the American Waterways Operators or the Coast Guard on participating in a joint effort, but my association would look forward to participating. We do represent the licensed and documented mariners of the inland waterways and it is something that we would like to participate in.

Mr. TAUZIN. I can only urge you that it may well be that some on this committee and on the full committee and on the Floor or the Senate may want to add additional requirements to this bill. Before that consensus is reached, insofar as any elements of consensus can be attained in time for consideration of this measure, we would urge you to expedite consideration.

Obviously, in drafting the bill we recognized going in that this was a critical area that needs improvement, just as Secretary Peña pointed out that old tradition in this area has to yield to common sense and to change. Our committee concurs in that view and as soon as possible we need to get this effort and consensus going and as rapidly as possible terminated.

One point before my time is up, too, and I want to quickly get it in, Mr. Allegretti, you pointed out that compasses may not be important in inland waterways, in fact that other instruments may do a better job, but in regards to some of the information we just received from Mr. Kornegay, obviously compasses would be terribly important when it comes to operations in some of the ports of the Nation. Is that not correct?

Mr. ALLEGRETTI. That is correct, and I think to the extent that I am familiar with the details of the Fremont accident, that was

the kind of situation where a compass would have helped that operator make sure that he was aligned with the buoy.

Mr. TAUZIN. Here is the problem. Can we in the legislation define a requirement on a vessel that may be operating in a port one day, may be operating in an inland waterway the next day? If we don't require the compass, because in the inland waterways they are not very effective, and that same vessel has a tow operating in one of the ports where a compass is extraordinarily effective, we may have missed a vital part of the safety concerns of that vessel. Don't you agree?

Mr. ALLEGRETTI. I do agree and I think that therefore the potential solution to that is to draft the language of the bill in such a way as to require the vessel to have some type of direction assistance mechanism on it, whether that is a swing meter or rate of turn indicator or a compass, and then leave the detail to the Coast Guard as to where the line of demarcation is.

Mr. TAUZIN. But you understand the problem. So the vessel chooses a swing meter and all of a sudden it is operating in a port environment where a swing meter is not nearly as effective as a compass. We have missed something there. Would you disagree with that, Mr. Kornegay?

Mr. KORNEGAY. No, sir, I would not disagree.

Mr. TAUZIN. You understand our problem then? We want to continue our conversation on this, but I want you to know that is a deep concern of ours. If we leave it too flexible and the wrong choice is made as to equipment and the vessel ends up operating in another area where that particular equipment is not very useful and some other equipment is vital, we have missed—literally, we have missed the boat on it and I don't want to see that occur.

Let me yield to Mr. Barlow for questions.

Mr. BARLOW. Mr. Chairman, thank you very much for holding these hearings. I want to pay my deepest respects to you for the manner in which you convened hearings so quickly after the tragedies in the Gulf and got us focused on the problems of inland waterways.

Coming out of those hearings, we had dialog with the witnesses on possible engineering solutions using low cost, low frequency sensors on bridges and on the towboats and ships in inland waterways and the possibility of installing these sensors. Since that time, I have had my staff look into this area and there is an engineering company we found that is working with Exxon for the docking of tankers and large bulk carriers where they have sensors on the piers.

These very large carriers are, of course, very lengthy and you come in fog and a lot of damage can be done to piers and damage done to the hull of the ship itself if they aren't docking properly. I am wondering if we could ask—we as a committee could ask the Coast Guard to look into this particular technology that is being worked out with Exxon and see if there is application in some of the other areas. If I may, I would like to put into the record a description of the sensor process. Also, I ask that the committee ask the Coast Guard to give us a report on the applicability of this process. I would appreciate a response from this.

Mr. TAUZIN. If the gentleman would yield, first of all, the gentleman makes an unanimous consent request for introduction into the record today of information on the technology. And without objection, that is so ordered.

[The information may be found at end of hearing.]

Mr. TAUZIN. Secondly, it is my understanding that Secretary Peña has had numerous discussions on that very topic within the administration and that other committees of this Congress, including the Transportation HAZMAT Committee, Energy and Commerce, has examined that issue additionally, and there may be recommendations in the Secretary's package that we have not yet seen regarding that issue, but we will highlight it and we will make sure that we get some responses for you on it.

Mr. BARLOW. Thank you very much, sir.

Mr. TAUZIN. Well, I guess that is it then. I don't see any other questions. Let me thank you all. As I asked Admiral Henn and as I asked the Secretary to continue to dialog with us on changes in language that we can make to the bill, I would appreciate you doing the same thing.

All of your testimony is very instructive to us on suggestions for improvement, possible exemptions, possible refinements, possible targeting and flexibilities. All of those are very important to us.

If you have specific language changes that you think would be helpful in redrafting as we prepare for markup either this month or the next month, we would deeply appreciate that.

Where consensus can be found on some of these other issues, you know, we are going to stand ready to support amendments to the bill if, in fact, those consensuses can be achieved in time for us to hit our target date. But I want to stress again the goal of Secretary Peña and of the subcommittee, and that is that we report to the Congress and eventually put on the President's desk hopefully well before the anniversary date of that horrible tragedy in Mobile legislation that clearly moves very forcefully safety concerns in the inland waterways and the towing industry forward.

And I think we have a good start here. I am only asking you to make sure that it is as perfect as we can make it by the time we put it on the President's desk. In that regard, we all have the same interests in common, Ms. Powers and all of us from the governmental industry and from the public interest community standpoint. We all want the same thing here and I think it is incumbent upon us to have continuing dialoguing to see we get it as quickly as we can.

Bottom line is I don't want to hold it up any time if there is still outstanding controversy. I want to move what we can move as rapidly as possible. Thank you very much for your participation today, for coming long distances and for sharing with the Congress, again, some very important perspectives on this safety issue. We appreciate it. The hearing of this subcommittee stands adjourned.

[Whereupon, at 12:20 p.m., the Subcommittee was adjourned; and the following was submitted for the record.]

103D CONGRESS  
1ST SESSION

# H. R. 3282

To amend title 46, United States Code, to improve towing vessel navigational safety.

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## IN THE HOUSE OF REPRESENTATIVES

OCTOBER 14, 1993

Mr. TAUZIN (for himself, Mr. STUDDS, Mr. FIELDS of Texas, and Mr. COBLE) introduced the following bill; which was referred to the Committee on Merchant Marine and Fisheries

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## A BILL

To amend title 46, United States Code, to improve towing vessel navigational safety.

1 *Be it enacted by the Senate and House of Representa-*  
2 *tives of the United States of America in Congress assembled,*

### 3 SECTION 1. SHORT TITLE.

4 This Act may be cited as the "Towing Vessel Naviga-  
5 tional Safety Act of 1993".

### 6 SEC. 2. MINIMUM NAVIGATIONAL SAFETY EQUIPMENT FOR 7 TOWING VESSELS.

8 (a) IN GENERAL.—Section 4102 of title 46, United  
9 States Code, is amended by adding at the end the  
10 following:

1       “(f) Each towing vessel to which this chapter applies  
2 shall be equipped with navigational publications and  
3 equipment as prescribed by the Secretary, including—

4           “(1) marine charts of the area being transited;

5           “(2) navigational publications for the area  
6 being transited;

7           “(3) compasses;

8           “(4) radar; and

9           “(5) a fathometer.”.

10       (b) REGULATIONS.—The Secretary of Transportation  
11 shall issue regulations by not later than 6 months after  
12 the date of the enactment of this Act, prescribing naviga-  
13 tional publication and equipment requirements under sub-  
14 section (f) of section 4102 of title 46, United States Code,  
15 as added by subsection (a) of this section.

16       **SEC. 3. DEMONSTRATION OF PROFICIENCY IN USE OF**  
17                       **NAVIGATIONAL SAFETY EQUIPMENT RE-**  
18                       **QUIRED.**

19       Section 7101 of title 46, United States Code, is  
20 amended by adding at the end the following:

21       “(j) The Secretary shall require an individual who ap-  
22 plies for issuance or renewal of a towing vessel operators  
23 license to demonstrate proficiency in the use of naviga-  
24 tional safety equipment.”.

1 **SEC. 4. REPORTING MARINE CASUALTIES.**

2 (a) **EXPEDITED REPORTING REQUIRED.**—Section  
3 6101(b) of title 46, United States Code, is amended by  
4 striking “within 5 days” and inserting “by as soon as  
5 practicable, but in no case later than within 5 days,”.

6 (b) **REGULATIONS.**—Not later than 90 days after the  
7 date of the enactment of this Act, the Secretary shall pre-  
8 scribe regulations implementing the amendment made by  
9 subsection (a).

10 **SEC. 5. REPORT ON ADEQUACY AND EFFECTIVENESS OF**  
11 **MANNING AND LICENSING REQUIREMENTS**  
12 **FOR OPERATION OF TOWING VESSELS.**

13 Not later than 6 months after the date of the enact-  
14 ment of this Act, the Secretary of Transportation shall  
15 submit a report to the Congress on the adequacy and ef-  
16 fectiveness of manning and licensing requirements for op-  
17 eration of towing vessels.

18 **SEC. 6. REPORT ON FEASIBILITY OF ESTABLISHING A DIF-**  
19 **FERENTIAL GLOBAL POSITIONING SAT-**  
20 **ELLITE NAVIGATION SYSTEM FOR INLAND**  
21 **WATERWAYS.**

22 Not later than 6 months after the date of the enact-  
23 ment of this Act, the Secretary of Transportation shall  
24 submit a report to the Congress on the feasibility of estab-  
25 lishing a differential global positioning satellite navigation  
26 system for the inland waterways of the United States.

FINAL

Statement of  
The Secretary of the  
United States Department of Transportation  
Federico Peña

Committee on Merchant Marine and Fisheries  
Subcommittee on Coast Guard and Navigation  
House of Representatives  
March 3, 1994

TOWING VESSEL NAVIGATIONAL SAFETY

Final  
Statement of the Secretary of the  
United States Department of Transportation  
Federico Peña  
before the  
Committee on Merchant Marine and Fisheries  
Subcommittee on Coast Guard and Navigation  
House of Representatives  
March 3, 1994

TOWING VESSEL NAVIGATIONAL SAFETY

Good morning Mr. Chairman and members of the Subcommittee.

I am pleased to have the opportunity to appear before you today to discuss the serious problem of towing vessel navigational safety. Accompanying me is Rear Admiral A. E. Henn, Chief of the Coast Guard's Office of Marine Safety, Security, and Environmental Protection, who will be available to respond to any specific operational questions that the Subcommittee may wish to ask.

Before I begin, I would like to convey to Chairmen Studds and Tauzin, and Congressmen Fields and Coble the appreciation of the Department of Transportation and the Administration for the very serious and thoughtful approach they have taken toward assessing the problem of towing vessel navigational safety in H.R. 3282, the "Towing Vessel Safety Navigational Act of 1993." Similarly, this Subcommittee is to be complimented for its attention to this important issue and for scheduling this hearing to obtain the necessary legislative record.

Today the Subcommittee will hear testimony from a wide range of witnesses on the best way to ensure towing vessel navigational safety. We all share the frustration of the Coast Guard when it is called in to rescue the victims of an accident that might have been prevented if the operator of the vessel had had better navigational equipment aboard or better training.

Clearly, the collapse of the Judge Seeber Bridge in New Orleans and the Amtrak derailment at Bayou Canot, Alabama were great tragedies. The loss of life was staggering. And, I can tell you personally, that seeing the victims, comforting the survivors and meeting the bereaved brings home the human costs of safety lapses. While the oil spill in Puerto Rico, fortunately, did not claim any lives, its environmental and economic effects were widespread. The issues before us are complex. As we take steps to ensure that tragedies such as these are prevented in the future, let us recognize that there are no easy solutions or quick fixes to which we can turn to eliminate the possibility that human error, the largest cause of these problems, equipment malfunction, or adverse environmental conditions, will occur. Let me assure you that my commitment to safety is of the highest level.

On September 30, 1993, I wrote to Congress outlining a series of safety reviews that I initiated in response to the derailment of Amtrak's Sunset Limited. On December 10, 1993, I sent to Congress our final report, entitled "Review of Marine Safety Issues Related to Uninspected Towing Vessels," containing recommendations for changes to the Marine Safety and Waterways Management Programs. A copy of the recommendations is attached to this statement.

That report formed the basis for the four-pronged approach I developed to increase safety in the towing vessel industry. First, more stringent licensing requirements for operators of uninspected towing vessels

must be developed, and these licenses should have levels of qualification. Restrictions for such levels of qualification may be based on route, gross tonnage or horsepower of the towing vessel, and type of towing configuration. The basic three-year apprenticeship should qualify an applicant for a basic license only. Operators must be proficient in the use of navigational and safety equipment. In order to advance beyond a basic license, an operator should be required to attend practical, hands on training or a Coast Guard approved simulator course and pass a written, practical or simulator examination, or some combination thereof. As a complement to this, towing vessel owners must employ qualified, experienced personnel as operators in charge of their vessels.

Second, requirements for radar and upgraded navigational equipment on board uninspected towing vessels must be established. Specifically, operators should be required to have on board as equipment up-to-date marine charts for the area to be transited, current or corrected navigational publications, and a marine radar system for surface navigation. In addition, a compass and depth finder may be necessary tools for safe navigation in certain areas.

Third, notification of accidents must be assured and also assured more promptly. Particularly where barges are concerned and an operator might be in some doubt about whether a tow has been lost or might have struck something, the rule must be--when in doubt, report. To enforce this requirement, the penalty for failure to report immediately must be increased significantly, and I recommend raising the maximum penalty from \$1,000 to \$25,000.

Fourth, aids-to-navigation in the vicinity of bridges must be improved where necessary. I would like to point out that damaging an aid-to-

navigation can result in a criminal penalty of up to \$2,500 and/or imprisonment up to a year, and the individual responsible must also pay to repair or reposition the aid-to navigation. Experience has proven this level of fine to be too low to justify extensive prosecution. Therefore, we should consider increasing the criminal penalty and instituting a civil penalty that can be assessed by the Coast Guard. Anyone who damages an aid-to-navigation must report it to the Coast Guard. Failure to report, particularly when an accident results, can lead to an adjudicative process culminating in severe penalties, up to revocation of the individual's license.

Bridges that have been found to pose an unreasonable obstruction to navigation under the Truman-Hobbs Act must be repaired or replaced. Between 1980 and 1991, 773 tows struck bridges. Nine bridges presently have been declared unreasonable obstructions to navigation under the Truman-Hobbs Act and are either under design or reconstruction. Additionally, there are approximately 52 others that either are being or will be investigated to determine whether they are unreasonable obstructions to navigation according to the Truman-Hobbs criteria. I should note that the President's budget provides for funding to repair the highway bridges from the Highway Trust Fund.

Many details of this four-pronged approach will be developed during the regulatory process. Where the Department could implement some of these proposals without a rulemaking or legislation, action is already underway. The curriculum of the maritime radar courses is under review to determine if the current courses are adequate for specialized operations on some waterways, particularly western rivers. The review will also determine if the existing courses reflect state-of-the-art radar technology and operational procedures. The Commander of the Eighth Coast Guard District

in New Orleans has established a Coast Guard-industry team to identify all waterways, including Bayou Canot, where new or additional aids-to-navigation may be needed. Similarly, a review of all bridges crossing navigable waters is underway.

Additionally, there are certain issues that should be studied. Specifically, we should examine the adequacy and effectiveness of our manning and inspection requirements and look at whether the laws for all other commercial vessels on inspection and manning should apply to the inland-waterway towing industry. Traditionally, it was felt that, because of differing operating conditions, mandatory manning levels were not necessary and the cost of industry-wide Coast Guard inspection would be too high for any expected benefits. However, I am not satisfied with traditional approaches. Voluntary industry standards may be an appropriate approach to raising safety performance, but we should also examine whether governmental requirements are necessary.

Statutory and regulatory provisions currently dictate the manning level of the navigation watch aboard a towing vessel. Both the work-hour limitations and the navigation watch provisions affect the manning complement on an uninspected towing vessel. Clearly, all inland towing vessels should have someone aboard who is knowledgeable in the operation and maintenance of the engineering systems and an operator competent to pilot the vessel through the waters in which it is traveling. The larger question of whether masters, mates, engineers or pilots should be required is more difficult to answer. The industry is diverse and many towing companies are small. The Coast Guard has embarked on a major research project to develop an analytical, function-based model for rationalizing our approach to determining the minimum crew complement required for safe

operation of a vessel. The model will include workhour limits, hours of operation, and potential emergency situations as essential factors. Once completed, it will give us an accurate picture of how we should approach manning levels in the future.

Safe transportation is my priority. I believe we should move now to bring the enhanced licensing and equipment requirements into force, and take a careful look at whether we need to do more in the areas of manning and inspections. The loss of life in the Judge Seeber Bridge collapse and the Amtrak derailment was devastating, but every day property is damaged and cargo lost in minor towing accidents. My recommendations will not only save lives, but make the shipment of goods by inland barge more reliable. The inland barge system is an extremely efficient and economical transportation method for many shippers. It is our job to make sure it is as safe as possible, for all.

Technology has an extremely important role to play in towing vessel safety. The Global Satellite Positioning System, developed by the Department of Defense, and the augmentation of Differential Global Positioning System (DGPS), being developed for civil use by DOT agencies, will provide increased accuracy, productivity, safety and efficiency in sea navigation by providing marine navigators with the first precise, worldwide, continuous positioning and timing service. As a result, commercial shipping will be safer, more efficient, reliable and economical. Augmented with DGPS, and combined with the developing Electronic Chart Display and Information System, it will significantly improve waterway and harbor safety. The pronounced safety benefits of these systems will be a major improvement in avoiding collisions and groundings, and the resulting human and environmental losses such events cause. I am very excited about the

possibilities of this new technology and therefore I support the recommended study in H.R. 3282.

Even if we employ the latest technology for preventing accidents and improving survivability if one occurs, we must acknowledge that most accidents in all modes of transportation are caused by human error. Very few accidents are caused by equipment or structural failure; most are the result of poor judgment or performance by the operator of the equipment. A review of marine casualties for the period 1980 through 1991, involving towing vessels of fewer than 300 gross tons, shows that approximately 60% of the marine casualties were attributable to human error. Since the performance of the operator of the vessel is crucial in emergencies, we must ensure that the operator is well-trained, proficient in navigation, and alert. At the Department of Transportation, we have taken significant steps to reduce operator error. Mariners are already subject to the Department's rigid drug testing requirements and the Coast Guard's effective alcohol testing program. Under a proposal I discussed earlier, operators would be subject to licensing requirements, that would ensure proper training and proficiency with navigational and safety equipment.

I thank you for this opportunity to share my views on how we can increase safety in the vessel towing industry. Rather than offer legislation on behalf of the Administration, I would like to work with you and this Subcommittee to forge an overall approach that can be enacted and signed into law before September 22, 1994, the first anniversary of the tragic Bayou Canot accident.

Admiral Henn and I would now be happy to answer your questions.



## THE SECRETARY OF TRANSPORTATION

WASHINGTON, D.C. 20580

December 10, 1993

The Honorable Gerry Studds  
 Chairman, Committee on Merchant  
 Marine and Fisheries  
 U.S. House of Representatives  
 Washington, D.C. 20515

Dear Mr. Chairman:

On September 30, I wrote to the Congress outlining a series of safety reviews that I was initiating in the Department of Transportation, in response to the derailment of Amtrak's Sunset Limited near Mobile, Alabama. I now want to forward to you the resulting action plan that the Department is initiating in response to the tragic accident at Big Bayou Canot.

As you know, the National Transportation Safety Board is continuing its investigation into the probable cause of the September 22 accident. That investigation is expected to be completed early next year. I commend the Board for its work and, upon completion of the on-going investigation, look forward to receiving and promptly evaluating the Safety Board's recommendations.

In the interim, however, there are a number of critical safety initiatives identified in the Department's review of the Mobile accident and the subsequent emergency response that we believe should be undertaken immediately. These marine and rail safety initiatives are outlined in detail in the enclosed report. A separate set of actions designed to respond to recent highway-rail grade crossing accidents also is included in our action plan. In total, I believe these initiatives will enhance significantly the safety of our inland waterways and national system of railroads.

I am committed to ensuring that safety remains the Department of Transportation's highest priority. I firmly believe that the initiatives outlined in this package will help improve transportation safety, a process that will continue as the Department prepares its Coast Guard and rail safety authorization bills for submission to the Congress early next year. I look forward to working with you and others in the Congress in the months to come to enhance the safety of the traveling public.

Sincerely,

A handwritten signature in dark ink, appearing to read "Federico Peña", is written over the typed name.

Federico Peña

Enclosure

**Actions Initiated by the Department of Transportation  
to Enhance Safety on the Nation's Transportation System**

**I. Response to the Derailment of Amtrak's Sunset Limited**

As a result of the fatal barge/railroad bridge accident near Mobile, Alabama on September 22, 1993, the Secretary of Transportation directed the U.S. Coast Guard and the Federal Railroad Administration (FRA) to review the circumstances surrounding the accident, and undertake initiatives to minimize the risk of any similar tragedy in the future.

The preliminary work has now been completed and the Department has developed an action plan involving five emphasis areas:

- a. Developing more stringent licensing requirements for operators of uninspected towing vessels,
- b. Upgrading the requirements for radar and navigational equipment on board such ships,
- c. Improving the procedures whereby information concerning mishaps and collisions is reported,
- d. Seeking new means by which the structural integrity of bridges can be checked, and actions taken if damage occurs,
- e. Strengthening emergency preparedness, and enhancing the prospects for victims' survival if a crash occurs.

Some of these actions will require rulemaking or legislation, and others will involve building closer working relationships with Amtrak and the other railroads, as well as State and local governments.

**A. Developing more stringent licensing requirements for operators of uninspected towing vessels.** Licenses for operators of uninspected towing vessels (*inland tugs, and seagoing tugs below 300 gross tons, do not require Coast Guard inspection*) will be expanded to recognize different levels of qualification. The Coast Guard will initiate a series of rulemakings that will propose the following:

- Licensees who have only minimum basic qualifications should be restricted to those towing configurations, sizes and routes they are qualified to operate,
- Those who wish to increase the scope of their license should have to pass simulator courses and written examinations,
- All operators of radar-equipped towing vessels should be required to attend an approved radar observer training course,

- 2 -

- . Applicants desiring to operate on midwestern and certain Gulf state river routes must acquire operating experience on that route and pass an appropriate examination,
- . The equivalency between licensed masters and mates of ships, and those who operate uninspected towing vessels will be reassessed.

The Coast Guard will also emphasize the responsibility of towing vessel owners to employ qualified experienced personnel as operators in charge (or masters) of their vessels.

B. Upgrading the requirements for radar and navigational equipment on board uninspected towing vessels. The accident might have been avoided if the tug operator had known where he was in the fog, and his relation to the bridge. The presence of marine radar and other navigational equipment, and an operator proficient in their use, may have prevented the barge from striking the bridge.

- . The Coast Guard will initiate rulemaking to determine whether all uninspected towing vessels should carry a marine radar system for surface navigation, as well as marine charts for the area to be transited and current or updated publications. In addition, the rulemaking should seek to identify areas of operation where a compass, depth finder and other instrumentation are necessary tools for safe navigation.
- . The Coast Guard will amend the Aids to Navigation Manual to address specifically the need to consider approaches to bridges in the design for aids to navigation systems.
- . The Coast Guard, together with the Maritime Administration (MARAD) will review the existing standards of the approved inland radar observer courses, to determine if the existing curriculum meets the operational and safety needs of the inland mariner. In addition, the review will also develop the standards necessary to reflect current technology.
- . Each Coast Guard district will conduct a survey of all bridges under its jurisdiction and make case-by-case determinations regarding the adequacy of existing systems, the need for additional fendering systems, and possibly additional bridge lighting.

The Coast Guard will hold discussions with Congressional staff to include in H.R. 3282 provisions to link the requirement for compasses and fathometers to the area of operation of a towing vessel.

- 3 -

C. Improving the procedures whereby information concerning mishaps and collisions is reported. A matter of significant concern is how quickly and effectively notification is given to authorities, work crews and response forces regarding such an episode.

The Coast Guard will initiate a rulemaking proposing that the definition of marine casualties be expanded to include all collisions to bridges and other structures, and requiring that they be reported immediately (after all urgent safety concerns have been addressed). A related rulemaking covering mandatory notices of hazardous conditions will clarify that these conditions also include damage resulting from such collisions.

To the extent needed after vessel strikes, FRA will assist the Coast Guard (at the field office level) in identifying railroads that control operations over active railroad bridges and providing emergency telephone numbers.

The Coast Guard will initiate discussions on amending H.R. 3282, or develop a separate legislative proposal, to increase the maximum civil penalty from \$1,000 to \$25,000 for failing to report a marine casualty as defined under 46 CFR 4.05-1.

FRA has evaluated the need to strengthen procedures for verbal notification of railroad dispatching centers when bridges are struck and accidentally damaged by other transportation vessels or vehicles. It has determined that it is wise to vest coordination of bridge damage notification at a local level, rather than to attempt to pass information through centralized clearinghouses staffed by persons not familiar with the specific geography involved. Reliance on local resources is especially appropriate where, as in the case of the Mobile/Saraland accident, those most likely to make the report are not aware of their own precise location.

D. Seeking new means by which the structural integrity of bridges can be checked, and action taken if damage occurs. Following the accident, FRA conducted a 10-year analysis of previous train accidents involving bridge failures induced by damage from vessels and vehicles -- three involved bridges struck by highway vehicles and none by marine vessels. In 1992-3, FRA also reviewed railroad programs designed to ensure bridge structural safety, which indicated that most railroads, including all major railroads, have in place credible programs to inspect railroad bridges periodically and verify their structural integrity for loads allowed. The review also indicated the need to monitor the efforts of smaller railroads with respect to bridge safety.

FRA is conducting a review of in-use or available automatic detection systems capable of identifying misalignment or other structural damage to railroad bridges and communicating

warning through the signal system or by other means. This review is expected to be completed by the end of January 1994.

- . FRA, in coordination with the Federal Highway Administration and the Coast Guard, is performing a technology review to ascertain whether new or emerging technologies offer the promise of more effective detection of bridge damage at lesser cost than traditional methods. This is also scheduled for completion by the end of January 1994.
- . FRA will pursue the demonstration of any new technology that offers promise for more cost-effective application.
- . FRA will include the issue of bridge damage in its analysis of incursions onto the railroad right-of-way under a forthcoming rulemaking on high speed rail. Lessons learned in this context may be transferable to conventional rail operations.
- . FRA will adopt a policy for continuing effort in support of bridge structural safety by the end of 1993.

E. Strengthening emergency preparedness, and enhancing the prospects for victims' survival if a crash occurs. FRA has initiated, in coordination with Amtrak, a review of selected elements of emergency preparedness and response for passenger train accidents. They will

- . Review Amtrak's standard onboard emergency equipment, including emergency lighting; availability and ease of operation of emergency exits through doors, windows, roof, etc.; fire extinguisher; first aid kit; crowbar; and sledge hammer. A comparison of Amtrak with commuter and selected foreign operations should be complete by early 1994.
- . Review Amtrak's program to train local emergency responders and determine adequacy of Amtrak's current training material, which is prepared in videotape format. Amtrak has agreed to take a proactive approach in placing its training aids in the hands of emergency responders.
- . Review procedures for providing additional emergency egress and other safety information to all passengers, such as using seat cards, video presentations, and public address announcements. Solutions will be evaluated for commuter rail and will be incorporated into revised passenger car safety standards when issued.
- . Review and determine readiness of major railroad dispatching centers to respond to an emergency by promptly contacting local emergency responders in the affected jurisdiction.

FRA instituted a review of Amtrak crash survivability issues, including the performance of the locomotives involved in the Alabama accident regarding crash survivability. Although the locomotives remained intact, the accident was not survivable due to the forces involved and the location where the lead locomotive came to rest (under water). Fuel tanks on all three locomotives failed, but this accident was not a valid test of the new compartmentalized design which was expected to limit fuel loss under much less catastrophic circumstances.

## II. Reinvigorating the Department's Safety Efforts Relating to Highway-Rail Grade Crossings.

Recent serious transportation accidents, and particularly highway-rail collisions, highlight the concern we each share for safety in the national transportation system. While great progress has been made over the years in reducing fatalities at highway-rail crossings, a vehicle and a train collide nearly every ninety minutes somewhere in the U.S.

In 1992, 579 individuals lost their lives in highway-rail crashes and nearly 2,000 others were injured. Collisions at highway-rail crossings are the leading cause of fatalities in the entire rail industry, far surpassing fatalities among rail passengers or employees. This is particularly disturbing because these accidents are preventable.

The Department is now preparing an action plan, to be completed within 60 days, to reinvigorate our safety efforts relating to highway-rail grade crossings. It will be based on the following initiatives:

- . Develop integrated plans to safeguard the public through crossing closures, improved warning systems, better passive signage, grade separations, and other engineering improvements. Identify and promote specific system improvements at those crossings with active warning devices where, despite flashing lights or gates, 50 percent of fatalities occur.
- . Review passive signage effectiveness and options.
- . Review emergency notification procedures where crossing devices fail to work or vehicles are disabled at crossings.
- . Ensure inclusion of crossing safety impacts in analysis of plans for Federally funded transportation projects.
- . Increase public awareness by working with diverse groups such as Operation Lifesaver, Inc., the American Automobile Association, the National Association of Governors' Highway

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Safety Representatives, and others to strengthen public outreach during 1994 and beyond.

Complete promptly FRA rulemakings dealing with grade crossing warning signals (maintenance, inspection, and testing), and locomotive alerting lights.

Evaluate the results of ongoing research and development for actions that can yield additional safety benefits (e.g., locomotive horn effectiveness, reflectorization of rolling stock, etc.) and review the R&D plan for crossing safety to ensure all affordable opportunities are exploited.

Review the need for legislation or regulatory action to impose strict responsibilities on holders of private crossing rights commensurate with the crossing's risk to public users and rail operations.

Hearings on  
H.R. 3282  
The Towing Vessel Navigational Safety Act of 1993

Statement of  
Thomas A. Allegretti  
President  
American Waterways Operators

Before the  
Subcommittee on Coast Guard and Navigation  
Committee on Merchant Marine and Fisheries  
U. S. House of Representatives

March 3, 1994

Good morning, Chairman Tauzin and members of the Subcommittee. My name is Tom Allegretti and I am President of the American Waterways Operators (AWO). AWO is the national trade association representing the inland and coastal barge and towing industry and the shipyards which build and service our industry's vessels.

I appreciate the opportunity to again appear before the Subcommittee to provide AWO's assistance in your ongoing efforts to craft legislation which will ensure that inland river navigational safety is improved and enhanced. As you recall, Mr. Chairman, when I testified at the October 12 safety hearing, I pledged to you that AWO would work as a constructive partner to address this issue with you, the Congress, and the Department of Transportation, and I am most pleased to inform you that real progress has indeed been made toward reaching this most important goal.

Immediately following the October hearing, AWO mobilized to bring before our Board of Directors the legislation you, Chairman Studds, and Ranking Members Fields and Coble introduced -- H.R. 3282, the *Towing Vessel Navigational Safety Act of 1993* -- which would require that towing vessels be equipped with certain navigational equipment not presently prescribed by law or regulation. As you know, Mr. Chairman, on October 26, we were able to advise you that AWO's Board voted overwhelmingly in favor of supporting the bill. We also promptly held extensive discussions with AWO's Executive Committee and developed specific comments and recommendations concerning the particular requirements set forth in your legislation, which we submitted to you by letter dated November 9. Additionally, during the time since we last met, AWO initiated the development of nine recommendations to improve navigation safety, which were approved by the AWO Board and submitted to the National Transportation Safety Board at its hearings in December.

We will begin this morning by restating AWO's support for H.R. 3282. We note that most in the towing industry have long utilized and recognized this equipment as valuable in enhancing navigation safety. Given the diversity of towing industry operations, however, we also note that a particular navigation aid may add value in some locations, but have limited or no utility in others. Establishing navigation equipment requirements which apply to all towing vessels, in all circumstances, can consequently be problematic. We, therefore, believe it is essential that equipment requirements be based on the contribution which they will make to the safety of a vessel and its tow.

Compasses, for example, are effective as a direction-identifying device on large, open bodies of water. However, on the twisting, far narrower river systems, direction references, and compasses in particular, are of very limited utility. Instead, the inland towing industry uses swing meters (rate-of-turn indicators) to identify changes in the location of the tow between river banks. Swing meters, along with jackstays, generate information about motion relative not only to other vessels, but also to fixed objects such as bridges, shorelines, or fixed navigational aids. Much attention has been given to the lack of compasses on towboats, implying an inadequacy in safety or an effort by the industry to save money. This is not the case. A compass simply is not a useful tool for operators on the inland system. They are not as reactive or sensitive as rate-of-turn indicators. Moreover, a compass can generally be purchased for roughly \$200, one-tenth the cost of the widely used rate-of-turn indicators.

Similarly, fathometers have specific utility in areas where water depth fluctuates or where deep-draft vessels are used, such as on the Lower Mississippi River. However, fathometers are of limited use to many vessel operations on the inland system (the Ohio, Tennessee, Cumberland, and other tributary rivers) where depth is not a problem. In addition, shift boats and other small vessels which operate in limited geographic areas do not encounter problems with depth.

Radar is another tool commonly used aboard inland towboats for detecting the presence or movement of objects in or near the waterway. However, for very small vessels which operate in limited geographic areas which do not present positioning, depth, and other navigational problems, radar may not fulfill a practical, valuable function. We, therefore, recommend that the legislation be amended to grant the Coast Guard regulatory flexibility to (1) determine areas of operation where the specific equipment mandated in the bill needs to be used, and (2) determine whether small vessels operating in limited geographic areas need be required to add this equipment.

Finally, AWO's inquiry into safety improvements has not been limited to the content of H.R. 3282. Instead, we have gone beyond the requirements of the legislation to consider other navigation equipment which will contribute to safe operations. We recommend that consideration be given to additionally requiring a searchlight, whistle light, and general alarm on towing vessels. This equipment, like the other included in H.R. 3282, is widely used in the inland towing industry and has proven useful as an aid to safe navigation and vessel operation.

Marine charts and publications may also serve as important navigational aids. Nonetheless, we believe the Subcommittee should note that inland charts differ substantially from charts produced for coastal waters, and are, by themselves, of limited value to a vessel operator. Indeed, inland charts, which are more akin to waterway maps than traditional ocean charts, typically caution that they should not be used for navigational positioning purposes. To enhance the value of an inland chart, a towing vessel captain develops what is known as a "bar book" or "bar chart." A bar book begins as a standard marine chart but is annotated and personalized over time by a vessel operator to reflect the particular landmarks, changes in channel conditions, and the like, which the operator uses to navigate a given stretch of waterway. This personalized chart is among the most important of the navigational tools available to an inland towing vessel operator. Other useful publications include the Light List, a Coast Guard-issued publication which provides information on fixed aids to navigation and waterside structures, and the Local Notice to Mariners, also issued by the Coast Guard, which updates vessel operators on changing river conditions, lock closures, and special events which may impede navigation.

AWO believes the Subcommittee should note that as drafted, H.R. 3282 applies only to towing vessels. In fact, all other commercial vessels under 1600 gross tons -- not just towing vessels -- are currently not covered by existing Coast Guard regulations regarding the enhanced equipment requirements envisioned in H.R. 3282.

A very important issue raised by the bill's requiring new pieces of equipment concerns the legal impact such mandates will have on statutory "seaworthiness" requirements should the equipment fail or malfunction. For example, with radar required by statute, if a vessel's equipment malfunctions, it could be deemed "unseaworthy" should it continue to operate. Thus, a malfunction would cause the vessel to have to immediately anchor or moor -- regardless of weather conditions, time of day, location, etc. -- until repairs are made. Such a costly mandate is clearly not warranted under all circumstances.

This issue has been successfully dealt with before by 33 USC 1205, concerning the requirement that certain vessels carry radiotelephone equipment in order to communicate with other vessels. In that section, language was included which requires the vessel master to exercise due diligence to restore the communications equipment to effective operating condition "at the earliest practicable time." Section 1205 also provides that failure of a vessel's radiotelephone equipment "shall not, in itself, constitute a violation... nor shall it obligate the master of any vessel to moor or anchor his vessel." However, that statute does stipulate that the loss of radiotelephone capability shall be given consideration in the navigation of the vessel. We believe this language offers useful guidance for the development of H.R. 3282, and recommend that similar language addressing seaworthiness be added to the bill at mark-up.

Section 5 of H.R. 3282 requires a report on the adequacy and effectiveness of licensing and manning requirements for operators of towing vessels. While we generally support study provisions reviewing our industry operations, we believe that events may have already overtaken the bill's mandates in this regard. Specifically, the review initiated by Secretary of Transportation Federico Peña following the Amtrak derailment, and forwarded to Chairman Studds on December 10, included extensive recommendations concerning Coast Guard licensing initiatives. We note with interest the Secretary's public statements that the Department already has the requisite authority and expertise to take action in upgrading licensing requirements. We concur, and we applaud and support these activities. Thus, with this DOT report completed and licensing regulatory efforts already underway, it appears to us that the study envisioned in Section 5 has been eclipsed. We, therefore, recommend that the section be redrafted to instead ask the Secretary to report to the Congress on progress made to improve licensing requirements.

During this interim period, AWO pledges to continue to work with the Coast Guard, and will particularly focus our efforts on the following licensing issues which we believe will lead us in the direction of a better, safer waterway system for the future.

- Existing Coast Guard requirements for licensing towing vessel operators, masters, and mates focus heavily on knowledge and experience requirements and do not include a demonstration or test of an applicant's navigational proficiency. Many companies have instituted their own systems for performing such checks before they will entrust to a prospective captain responsibility for a company tow. We believe it is appropriate to consider including in the licensing process a requirement that an operator's proficiency be checked by a qualified person within the company.
- Similarly, we believe it makes sense to consider including such an attestation of proficiency in the license renewal process to ensure that a vessel operator maintains his or her navigational and boat handling skills.
- Companies should also be required to ensure that an operator is competent to handle his or her tow, given the variety of factors which may prevail in a particular situation (tow size, horsepower, geography, river and weather conditions, etc.). Given the number and complexity of the factors to which consideration must be given, however, great care must be taken in developing licensing requirements that are tied to one or more particular factors.
- While not likely to play a role in reducing vessel casualties (collisions, allisions, groundings), we believe entry-level training has value in preventing personal injuries suffered by towing vessel crews. As such, it is a worthwhile component of a company's overall safety program. To this end, we support the ongoing work of the Towing Safety Advisory Committee to develop voluntary guidelines (via a Coast Guard Navigation and Vessel Inspection Circular) for the training of entry-level personnel.
- Greater standardization of initial notification procedures for reporting marine casualties would be of benefit to both industry and the Coast Guard in eliminating inconsistency and confusion. Pilot industry/Coast Guard projects to institute standardized notification procedures are currently underway in the Second and Eighth Coast Guard Districts. We believe such efforts have merit and deserve consideration on a broader scale.

AWO's focus on these areas is significantly similar to those conclusions and recommendations reached by Secretary Peña's study, demonstrating remarkable agreement between industry and the Department of Transportation. This bodes well in two respects. The first is that we have really identified the most productive avenues to pursue. The second is that given these common views, the regulatory process should be facilitated, without undue delay because of fundamental chasms between industry and government. Indeed, AWO has actively assisted the Coast Guard in conducting its study and will continue to work with them to facilitate and ensure that the process of instituting these safety recommendations progresses. For these reasons, Mr. Chairman, AWO believes that you may take comfort in the fact that this process will work, and that it will produce beneficial results.

Returning to the bill's Section 5 manning study, as in the case of licensing, we suggest work to address this issue is already underway. As you know, Mr. Chairman, the Coast Guard has circulated for discussion an early draft of legislation which proposes a variety of changes in current manning requirements. Both labor and industry are fully engaged in the process, and detailed comments including proposed modifications have been submitted to the Coast Guard to move this initiative forward. Thus, we suggest that Congress allow the process to continue on its cooperative course and not reverse the effort already underway by mandating the proposed study. Committee oversight will certainly be exercised in this area when the Coast Guard submits to you its proposed legislative package.

In addition to working with you and the Subcommittee on H.R. 3282, AWO also provided extensive testimony on December 14 to the National Transportation Safety Board in its investigation of the Amtrak Sunset Limited accident. Much of the attention of both government and industry in the wake of the Amtrak accident has focused on the crucial role of a vessel and its personnel in ensuring navigation safety. While this is a

natural and necessary line of inquiry, we believe it is also important to look beyond the vessel and its crew to the safety of the waterway system in which they operate. If we are serious about improving navigation safety for all waterway users, we must also look to the safety of the waterways themselves and to the adequacy of the aids to navigation, marking systems, and protective structures established to help vessel operators navigate around bridges and other obstructions on the rivers. We believe the most meaningful safety solutions will be those which address each link in the navigation safety chain.

As you know, the casualty under investigation before the Safety Board specifically focused considerable attention on the issue of barge and towing vessel allisions with bridges and on the frequency with which barges and towing vessels are involved in accidents. This issue was also raised by the Chairman and others during the Subcommittee hearing last year.

While this is a pertinent area of investigation for both the NTSB and Congress, statistics cited in the wake of the casualty have unfortunately been alarming, contradictory, and frequently misleading. One newspaper, for example, reported that barges and towing vessels are involved in as many as four accidents a day! Such statistics are not only unsupported by Coast Guard casualty data, but also fail to take into account the nature of the towing vessel "casualties" reported. In fact, some 58% of dynamic casualties involving barges and towing vessels are groundings, the majority of which result in no damage to life, property, or the environment. Indeed, because federal regulations require reporting of all accidental groundings, even an incident in which a vessel touches bottom in mid-channel and proceeds without hindrance -- a common occurrence on alluvial river systems such as the Mississippi -- is logged in government files as a "marine casualty."

In an effort to learn more about towing vessel allisions with bridges, and to determine the severity of this problem vis-a-vis public safety, AWO undertook an examination of Coast Guard data on bridge allisions for the years 1980 through 1991. Our review of this data revealed several interesting patterns which we believe will be of particular interest to the Subcommittee.

First, Coast Guard data indicates that bridge allisions are not a frequent occurrence on the inland river system. During the 12-year period 1980 through 1991, barges and towing vessels were involved in some 772 allisions with 292 bridges, or 1.6% of the approximately 18,000 bridges which span the nation's inland waterways. This record must also be considered in the context of total vessel transits. For example, one of the most notoriously difficult bridges to transit on the Upper Mississippi River (Crescent Rock) was hit 16 times between 1980 and 1991. During this period, however, some 38,000 tows passed through the bridge. Thus, the actual rate at which allisions with this bridge occurred was one in almost 2,375 transits.

Second, the data indicates that bridge hits have not been widely dispersed throughout the river system, but have instead tended to involve a small group of "problem" bridges. The vast majority of the 292 bridges struck by barges or towing vessels between 1980 and 1991 were hit only once or twice. By contrast, a group of only 16 bridges accounted for some 37% of the allisions which occurred during that period. This concentration suggests that certain bridges have consistently posed problems for commercial inland navigators and may, in fact, be unreasonable obstructions to commercial navigation.

Interestingly, a comparison of those bridges which have most frequently been hit and those bridges identified by the Coast Guard as actual or potential obstructions to navigation under the Truman-Hobbs Act reveals remarkable consistency. (The Truman-Hobbs Act mandates that "No bridge shall at any time unreasonably obstruct the free navigation of any navigable waters of the United States." If a bridge is deemed such, either on account of insufficient height, width of span, or otherwise, or if there is difficulty in passing the draw opening or the drawspan of such bridge, the Secretary of Transportation is to require that alterations be made to render navigation through or under the bridge "reasonably free, easy, and unobstructed.") Significantly, each of the six bridges on the Upper Mississippi River which sustained 10 or more hits over the 12-year period -- as well as many of the other more-frequently-hit bridges on the inland system -- is currently under alteration, awaiting alteration design, or on the high priority list as qualifying for alterations under the Truman-Hobbs Act.

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These collision-prone bridges were generally built with little regard for commercial navigation, making transit through the bridge difficult for river traffic. They may have been constructed with draws too narrow to safely accommodate vessel passage or leave room for error, or placed in locations prone to fog or above river stretches with tight bends and tricky cross-currents. Many of these bridges were also constructed with poorly protected fenders and deflection devices.

The Coast Guard statistics strongly suggest that bridge allisions are not an across-the-board industry operations problem, but rather one closely linked to the design, construction, and location of particular bridges. This suggests that attempts to reduce the incidence of bridge hits should begin with a determination of the level of danger posed by each bridge in terms of its potential to obstruct commercial navigation. AWO and the towing industry have been actively involved in making such determinations, and we are working regionally with the Coast Guard to identify and prioritize changes which should be made to bridges within specific river segments. Indeed, we have already submitted, in concert with the Gulf Intracoastal Canal Association and the Warrior-Tombigbee Development Association, a list of 17 bridges identified by waterway users as posing long-term navigation problems to the Commander of the Eighth Coast Guard District.

Given the critical role bridge location has in navigational safety, we are particularly concerned that the Administration's FY 95 budget proposes that highway bridges determined to be an obstruction to navigation will be funded through the federal-aid highway program instead of via the existing separately-funded Coast Guard program. We are concerned the navigation-related bridge designations will be lost if the program is separated from direct Coast Guard responsibility and, therefore, recommend the Subcommittee oppose this program alteration.

Finally, Mr. Chairman, I unfortunately feel compelled to again voice our strong objection to requiring Merchant Mariners Documents (MMDs) for deckhands and cooks serving in the inland fleet. Although the Coast Guard clearly shares our view that MMDs -- which require no training or showing of marine competence as a prerequisite to issuance -- are in no way related to improving safety on the waterways, we understand efforts are nevertheless underway to add this requirement to H.R. 3282. In our view, this does an extreme disservice to the valuable, safety-enhancing provisions of your proposal by adding an unnecessary, special interest requirement which serves no public policy purpose. It clearly detracts from this most important and worthwhile effort. If the votes are there to pass the MMD proposal, we only ask that the issue be considered separately -- on its own merits -- and not gain a free ride on an important piece of legislation.

Mr. Chairman, thank you for the opportunity to address the Subcommittee today on safety issues which are of utmost concern to our industry. I would be happy to answer any questions members of the Subcommittee may have.

COAST GUARD AND NAVIGATION SUBCOMMITTEE  
PUBLIC HEARING OF H.R. 3282  
WASHINGTON, D.C.

STATEMENT OF  
CAPTAIN JOHN R. SUTTON  
PRESIDENT  
AMERICAN INLAND MARINERS ASSOCIATION  
MARCH 3, 1994

## **I. INTRODUCTION**

Good morning, Chairman Tauzin and members of the subcommittee, my name is Captain John R. Sutton. I hold the following United States Coast Guard licenses: Master, First Class Pilot, and Operator of Uninspected Towing Vessel. I also hold an Unlimited Radar Observers certificate approved by the Coast Guard.

I have come to Washington, D.C., today to speak to the subcommittee both individually as a professional mariner, and also in my capacity as the President of American Inland Mariners Association. American Inland Mariners Association is a newly formed association of United States Coast Guard licensed and documented "inland mariners". Inland mariners are those employed on the inland waterways of the United States. We generally work aboard towboats that push barges on the nation's rivers. This is to be contrasted with "blue water mariners", employed on deep sea or ocean going vessels.

While the duties and safety concerns of the inland as opposed to the blue water mariner are vastly different, this difference, unfortunately, is often not taken into consideration by regulatory agencies when promulgating safety regulations. We have therefore organized for the purpose of developing our own voice within the maritime community.

One of the goals of American Inland Mariners Association is to assist mariners with the increasingly complex United States Coast Guard licensing and renewal process. The association also seeks to improve the safety of our nations inland waterways, through increased communication with the regulating agencies of our industry and improved communication with our industry leaders. That is our purpose for participating in these hearings.

We have come here today to express our opinion on H.R. 3282, also known as the "Towing Vessel Navigation Safety Act of 1993". We also wish to make some recommendations of our own for improved waterways safety. These are based on our experience as professional mariners and towboat operators. Finally, we wish to discuss some of the recommendations that have been made by the United States Coast Guard in the "Review of Marine Safety Issues Regarding Uninspected Towing Vessels". This report was prepared by the Office of Navigation Safety and Waterway Services and the Office of Marine Safety, Security and Environmental Protection.

## **II. Comments on H.R. 3282**

We would like to commend the sponsors of H.R. 3282 for responding to the void in the regulation of uninspected towing vessels. American Inland Mariners Association recognizes the necessity for minimal navigational safety equipment required on today's commercial towing vessels. However, while American Inland Mariners Association supports H.R. 3282 in theory, we do not support this specific piece of legislation as it is presently written. We feel that while it may satisfactorily address safety concerns relative to blue water vessels, it is too broad and in many respects is simply not tailored to the safety needs of the inland maritime industry and its mariners.

Our position on each section of the proposed legislation is as follows:

### **Sec. 2 Navigational Publications and Equipment**

We at American Inland Mariners Association generally approve the five pieces of navigational equipment prescribed by this section. However, all five pieces of equipment are not necessary for all vessels. For example, a compass is essential for vessels that transit bays, sounds, and other areas of open water. However, a compass is useless for vessels that only transit rivers.

Fathometers (depthfinders) are useful navigational aids for vessels that regularly transit where water depth fluctuates. However, fathometers are not essential for vessels that transit in areas in which water depth fluctuation is not a problem. Examples of these are fleet shift boats and vessels that transit waters maintained by the United States Corps of Engineers to specific project depths.

This section is an example of indiscriminate legislation that does not differentiate between the problems of inland and blue water navigation. Navigational equipment should only be required where it is needed. Requiring equipment that is unnecessary for the specific situation, such as discussed above, will result in an unnecessary financial burden for vessel owners without an increase in maritime safety.

In lieu of a compass for vessels that regularly transit rivers we would like to suggest to the committee that a "rate of turn meter", also known as a "swing meter", be substituted as prescribed equipment on towing vessels that regularly transit the "Western Rivers". This has been a recognized and important piece of navigational equipment on large river towboats for many years. It provides the mariner with a tool that will tell him/her if the vessel is turning to the port (left) or starboard (right).

### **Sec. 3 Proficiency in Use of Navigational Safety Equipment".**

We at American Inland Mariners Association interpret this to mean that the mariner will be required to obtain and maintain Radar Observers Certificates for the issuance and renewal of a license to operate uninspected towing vessels. Most professional mariners would not object to such radar certificates of proficiency. Nearly all inland mariners, however, object to the certificate as it is administered today.

The current Maritime Administration and Coast Guard approved course is adapted to the needs of deep sea mariners. The course teaches the mariner a mathematical triangulation for determining the closest point of approach (C.P.A.). Determining a vessel's C.P.A. allows the mariner to make a determination as to whether her/she should alter the course and speed of the vessel to prevent a collision at sea. While necessary for deep sea mariners, however, this is not a useful navigational aid for inland mariners transiting a twisting, turning river.

As a pilot of one of the largest river towboats on the Mississippi River that regularly moves forty loaded barges down the river, weighing in excess of 65,000 gross tons, I can tell you from experience that I would not be able to safely navigate my vessel, act as lookout, and make an accurate C.P.A. plot to determine if a risk of collision existed.

The "Radar Observers" course as taught today simply does not reflect accurate working conditions for inland mariners and should be adapted to do so.

### **Sec. 4 Reporting Marine Casualties**

As professional mariners we have no objection to the reporting of marine casualties as soon as practicable. In fact, timely reporting often prevents the public and other mariners from experiencing casualties.

As we in the maritime community know, however, some allisions involve only slight contact between a vessel and a structure, such as a bridge fendering system, with no damage incurred to the structure. While such allisions are most common on the Upper Mississippi and Illinois rivers, they are not limited solely to these areas.

The restricted navigational spans of some highway and railroad bridges is the cause of the majority of the incidents involving such slight contact. It is not uncommon for towboats, with tows 1000 ft. by 105 ft., to transit bridges having as little as eight feet of horizontal clearance.<sup>1</sup> Incidental contact with the fendering systems of such bridges is unavoidable. Such incidental contact, however, does not compromise the structural integrity of these bridges, or cause structural damage to the vessels involved.

As stated above, American Inland Mariners Association feels that the prompt reporting of all maritime casualties is important. However, we do want the subcommittee to know that sometimes incidental contact between a vessel and a structure such as a bridge is unavoidable, due to circumstances beyond the control of the mariner.<sup>2</sup>

**Secs. 5 & 6 Report on Adequacy and Effectiveness of Manning and Licensing Requirements for Operation of Towing Vessels; Report on Feasibility of Differential Global Positioning System for Inland Waterways.**

While American Inland Mariners Association has an opinion on each of these areas, we will defer comment on these subjects until the Secretary of Transportation has submitted his reports to Congress.

### **III. Suggested Safety Improvements**

We feel that if Congress and the Department of Transportation truly want to improve the safety of our nation's waterways, legislation must be enacted to cover many areas other than just minimal navigation equipment and the proficiency testing of the mariners that use such equipment.

With the improvement of today's river towboat and the improvement of our nation's waterways by the Army Corp. of Engineers Dike Program, commercial towing vessels move 40% to 50% more cargo today than thirty years ago. One of the major problems that we mariners see on a daily basis, however, is that we are currently navigating railway and highway bridges that were not designed and built to accommodate the size of the tows and traffic flow that currently transit through them today.

Some Congressional action that we feel will improve the safety of our inland waterways with regard to bridges and aids to navigation are as follows:

(1) Increased funding to the United States Coast Guard Bridge Program to provide adequate resources for the inspection of all bridges that cross navigable waters to determine the adequacy of existing bridge fendering and lighting systems.

(2) Mandate an in depth study of United States Coast Guard "Marine Casualties Data" to determine the bridges most frequently struck by commercial traffic. A study of this nature would provide the United States Coast Guard and Congress with the needed information to determine those bridges that do in fact pose a navigational hazard to commercial towing vessels. Once those bridges are so identified, funding can be provided through the

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<sup>1</sup> An example of such a bridge is the Elgin, Joliett, and Eastern (the E.J. & E.) Railroad Bridge, Mile 270.6, Illinois River. This bridge has a horizontal clearance of only 113.6 ft.

<sup>2</sup> In addition to the problem of restricted bridge spans, other unavoidable causes of incidental contact include currents, mechanical failure, weather, and visibility.

"Truman-Hobbs Act of 1940", 33 U.S.C. § 523, to rectify the problem.

(3) Amend bridge statutes and regulations to contain authority to retroactively require the fendering of bridges that significantly restrict navigational clearances. It is my understanding that this may be achieved by amending the "Ports and Waterways Safety Act", 33 U.S.C. § 121 et seq., and 33 C.F.R. § 118.40.

(4) Amend bridge statutes to impose a substantial penalty on bridges owners who continue to neglect bridge lighting.

(5) Increase funding to the United States Coast Guard for the study of improving aids to navigation on and near all bridges that cross navigable waterways.

(6) Impose a substantial penalty on owners of structures such as docks, electrical highline towers, and barge fleeting areas, who continue to neglect the required lighting of such structures in navigable waters.

(7) Require the issuance of endorsements requiring basic navigational knowledge and skills to operators of small recreational watercraft that share the navigable waterways with commercial traffic. There are millions of recreational watercraft that share the inland waterways with commercial vessels. Thousands of these watercraft operators are not familiar with the "Rules of the Road". The operators of such watercraft pose a hazard to navigation not only to fellow boaters, but also to commercial towing vessels and the professional mariners that operate them.

Mr. Chairman, these are just a few recommendations that we feel would improve the overall safety of our nations waterways. The commercial towing industry and our nations waterways are a diverse and complicated system. We feel that no one piece of legislation will be able to truly improve waterway safety and improve the safety of the traveling public without first researching all parameters of the maritime industry.

#### **IV. Proposed Simulator Training for Operators of Uninspected Towing Vessels**

In the United States Coast Guard's "Review of Marine Safety Issues Regarding Uninspected Towing Vessels"<sup>3</sup>, the Coast Guard has made nineteen specific recommendations regarding the standards for obtaining and renewing the Operator of Uninspected Vessels (OUTV) license. Of these nineteen recommendations, three recommendations specifically require mariners to pass Coast Guard approved simulator training examinations for acquiring, increasing the scope of, and renewal of the OUTV license.

To my personal knowledge there are only two such simulator training facilities in the United States that have courses adapted to the needs of the inland waterways. Of these two courses, neither is currently capable of determining the proficiency of a mariner working on a large towboat that handles tows or flotillas of barges weighing in excess of 25,000 gross tons.

If the Coast Guard does adopt such required simulator training, the expense would be born by the mariner and not his/her employer. Course fees currently cost in excess of \$2,000.00 and would be required every five years when a mariner renews his/her license.

There is no doubt that in the future simulators may play an

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<sup>3</sup> Memorandum from the Chief, Office of Marine Safety, Security and Environmental Protection, to the Commandant, United States Coast Guard, dated December 1, 1993.

important role in testing the proficiency of mariners. However, the cost of such simulation for an individual that makes \$25,000 to \$45,000 per year would be unduly burdensome given the benefit that can be currently derived from such testing.

#### **V. Conclusion**

The members of American Inland Mariners Association and I respectfully request that the Coast Guard and Navigation subcommittee hold several other hearings pertaining to the regulation of the OUTV license now issued by the United States Coast Guard. We would suggest that meetings be held in the East Coast, Mid-West, Gulf-South and West-Coast regions to allow a wide and diverse attendance of inland mariners. This would allow the subcommittee to obtain opinions from several hundred professional mariners, rather than just from the maritime industry lobby and the labor unions that represent only a small percentage of today's inland mariners.

Enclosed is a list of inland towing companies that have offered to allow the subcommittee members to board and ride their towboats. This would give the members the opportunity to observe the day to day operations of an inland river vessel, and the various conditions that confront the inland mariner in his/her occupation. American Inland Mariners Association and I would like to thank the subcommittee for allowing our opinions to be entered into the record. We would also like to thank Representative Tauzin and his office for arranging to place us on the official witness list for this hearing.



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**TESTIMONY OF**

**NATURAL RESOURCES DEFENSE COUNCIL  
CHESAPEAKE BAY FOUNDATION**

**on**

**HR 3282  
TOWING VESSEL NAVIGATIONAL SAFETY ACT  
of 1993**

**Before the**

**SUBCOMMITTEE ON COAST GUARD AND NAVIGATION  
COMMITTEE ON MERCHANT MARINE AND FISHERIES  
U.S. HOUSE OF REPRESENTATIVES**

**March 3, 1994**

**PREPARED BY:**

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The Natural Resources Defense Council and the Chesapeake Bay Foundation welcome the opportunity to make this statement to support the measures called for by HR 3282 and the recommendations contained in the recent Coast Guard Review of Marine Safety Issues Related to Uninspected Towing Vessels. We also wish to comment on the urgent need for additional measures to improve safety in barge and towing vessel operations. With more than 170,000 members throughout the country, NRDC has participated in the development of federal and state legislation and regulations on issues relating to marine oil spill prevention and has published reports on barge and tanker safety in U.S. ports and waterways - No Safe Harbor in 1990 and Safety at Bay in 1992. CBF focuses on environmental issues relating to Chesapeake Bay, the largest estuary and one of the most environmentally sensitive coastal areas in the U.S., and is about to publish a new report on oil transport safety on the Bay. CBF has approximately 86,000 members, mainly in the Bay area.

The safety of tank barge operation is a matter of vital importance and growing concern for the protection of life, property and the marine and coastal environments. In U.S. waters, there are about 5,800 tugs and towboats and 31,000 barges, including 4,000 tank barges that carry oil and other liquid cargoes. Barges carry about 30% of all oil transported in the U.S. and a much larger percentage of that transported on U.S. inland and coastal waters.

Barge groundings and collisions account for a very large part of the oil spilled in U.S. waters--nearly 2 million gallons during a recent two-year period and more in some years than tanker accidents. According to the American Waterways Operators, there were 36 barge groundings and collisions on the Hudson River alone during the years 1981-1989, resulting from human factors. The two largest oil spills in Chesapeake Bay resulted from accidents involving barges and towboats, spilling more than half a million gallons.

Barges generally operate in nearshore waters with greater environmental sensitivity and hazards to navigation, often amid heavy traffic of tankers and other ocean-going vessels. Traffic on many bays, ports and waterways is dominated by barges and their towing vessels.

Barges are restricted in their movements, and handling them in ports and channels can be more difficult

than handling self-propelled vessels. The Coast Guard points out that towing operations present unique shiphandling and seamanship considerations.

Recent accidents have heightened concern about the safety of tug/barge operations and the adequacy of present federal legislation and regulations. In September 1993 a tragic accident occurred on the Big Bayou Canot in Alabama, when the uninspected towboat Mauvilla with six barges apparently became lost in fog without the benefit of a chart of the area and strayed into an impassable bayou, striking a railroad bridge. An Amtrak train was derailed while crossing the bridge, resulting in the death of 47 passengers and crew.

Less than four months later the single-hull barge, Morris J. Berman, towed by an uninspected towboat, grounded on a coral reef off the resort beaches near San Juan, Puerto Rico, when a reportedly defective towline broke - for the second time on its brief coastwise voyage. More than 600,000 gallons of heavy fuel oil were spilled in the grounding--plus 100,000 more when the barge was scuttled--fouling beaches and causing other natural resource damage. Early reports said cleanup expenses to date exceeded \$30 million.

The circumstances of these two accidents, as reported, strongly indicate that they were attributable primarily to personnel and equipment deficiencies and reflected inadequate regulatory standards.

Dealing with the failures and deficiencies that led to these particular accidents is not enough. The next accidents will be caused by other deficiencies, unless they are dealt with now.

Coast Guard Review and HR 3282. Concern about towing safety following the Mauvilla accident prompted the Secretary of Transportation to request a Coast Guard study, leading to its December 1993 "Review of Marine Safety Issues Related to Uninspected Towing Vessels" (the Review). The Review is an important document, containing valuable discussion of towing vessel operations. It states that uninspected towing vessels were involved in 7,664 casualties directly attributable to personnel errors during the years 1980-1991; and nearly two-thirds of these casualties involved uninspected towing vessels under 300 gross tons.

The Review contains important conclusions and recommendations. One of its most important conclusions is that a towing vessel and the barge or barges that it tows should be considered a single system--that the towboat is not a stand-alone unit. The Review also concludes that the training, knowledge and experience required under present rules are inadequate for many levels and types of service--and that navigation equipment and information needed for the operation of the tug/barge unit should be prescribed by regulation. It makes recommendations to meet these deficiencies, with emphasis on higher licensing standards, simulator training and testing, and navigation equipment, charts and publications.

HR 3282 covers some of the same issues as the Review and calls for studies of manning and licensing requirements and use of the global positioning system for inland waterway traffic.

We wholeheartedly support the provisions contained in HR 3282 and those recommended by the Coast Guard Review. But we believe they stop far short of the improvements in tug/barge regulation that are called for.

The following are key additional subjects that we believe should be addressed promptly by legislation or regulation.

(1) Inspection. Inspection procedures are designed to ensure adequacy of structure, manning, equipment and operating condition. Under present law as applied, towing vessels are not subject to inspection unless they are seagoing coastwise vessels and are 300 gross tons or more in size. This exempts from inspection most coastwise and all inland towboats - including those involved in the Alabama and Puerto Rico accidents.

A tug of less than 300 tons can tow barges many times its size - barges that are themselves subject to inspection if they are tank barges.

We strongly support action to make towing vessels subject to inspection under Title 46 of the U.S. Code.

(2) Treatment as Tank Vessels. A towboat exists to propel barges. As the Coast Guard concluded in its Review, a towboat and barge should be regarded as a single unit.

We believe therefore that towboats used to tow tank barges should be treated as tank vessels for all relevant purposes, such as manning and navigation. They should be subject to Chapter 37 of Title 46, which provides for the regulation and inspection of vessels engaged in "carriage of liquid bulk dangerous cargoes", and to other laws and regulations that apply to tank vessels. If this purpose cannot be achieved by regulation under present law, we urge that the necessary legislation be included in the pending bill.

(3) Training and Licensing. The primary causes of accidents in the tug/barge industry are related to personnel error. Present standards for licensing operators of towing vessels are among the lowest set by the Coast Guard for any professional qualification. Proficiency is not tested or evaluated. Service requirements are limited. In testimony before this subcommittee at a hearing held in June 1991, James H. Sanborn, Executive Vice President of Maritrans GP Inc., one of the largest independent U.S. tank barge companies, stated that present Coast Guard standards are unacceptable; that sharply increased standards of training and demonstrated proficiency are necessary; and that training and licensing standards and methods of determining competency for towing vessel officers under present rules are inadequate.

This same company requires at least 5 to 7 years of supervised and evaluated training and experience for officers of their coastal or port barge units--more for large units. As a result, it says its accident rate has been reduced to one-third the level of a decade ago. According to information furnished by The American Waterways Operators, some other major towing companies also apply standards of supervised and evaluated training and experience far greater than those required by Coast Guard regulations.

Leading towing companies thus protect their own vessels, cargoes and crews, through the standards they apply for their own personnel. The public is entitled to comparable protection, for their safety and for protection of the marine and coastal environment, through Coast Guard rules applicable to all operators - including small or marginal ones that may not voluntarily apply suitable standards. According to Coast Guard data, the majority of companies in the coastwise towing industry operate only one

or two barges, and many of these companies are undercapitalized.

We urge the Coast Guard to strengthen substantially the licensing standards for towboat operators and to include not only the measures recommended in its Review but also high standards of supervised and evaluated training and experience and testing of proficiency for all levels of qualification.

(4) Pilotage. We believe that when in pilotage waters all barges over a minimum tonnage (for example, 1,000 tons) that are subject to federal jurisdiction, including the towing vessels that propel them, should be under the direction and control of a pilot holding a federal license or pilotage endorsement for the waters being traversed. 1/

Under present federal law and regulations, towboats and barges in inland trade are not subject to pilotage requirements. Seagoing coastwise tugs over 300 gross tons and barges are in principle subject to pilotage under present law but have the benefit of exemption under a Coast Guard rule issued in 1985. 2/ This rule exempts self-propelled vessels (including tugs) of 1,600 gross tons or less and tank barges of 10,000 gross tons or less (including those carrying oil or other dangerous cargoes) from employing personnel who hold federally issued pilots' licenses. Instead these barges and tugs may be "piloted" by the operator of the tug if he meets certain minimal requirements, without hands-on experience, supervised training or an examination of skill and knowledge; under the rule, the operator is said to "serve as" pilot. These requirements are substantially less than those for federal pilots' licenses. 3/ Moreover, the Coast Guard does not oversee or attempt to verify or ensure compliance with even these minimal requirements, for the

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1/ State pilotage requirements apply only to the very few tug/barge units that are engaged in foreign trade.

2/ Prior to 1985, federally licensed pilots were required for barges over 1,000 tons.

3/ And even the federal license requirements are generally regarded as only the threshold or entry-level standard for a genuine program of pilot training and qualification.

operator is allowed to "self-certify" his compliance (i.e., it is left to his conscience). These personnel thus do not carry a license or other document indicating that the Coast Guard confirm their qualifications.

Barges of 10,000 tons can carry up to 7 million gallons of oil. Very few tank barges exceed this tonnage; when the 1985 rule was adopted it exempted all but 22 barges nationwide. And most barge traffic (more than 80% of coastwise traffic, for example) involves the carriage of oil and other hazardous liquids.

We believe that action is needed to eliminate this exemption and to ensure that the pilots of tug/barge units under federal jurisdiction will meet licensing standards that include strong and effective provisions for experience, training, examination and oversight.

(5) Towing Safety Advisory Committee (33 USC Sec. 1231a). TSAC has played a major role - perhaps a dominant one - in the development of regulations for the tug/barge industry. Except for two members from the "general public" its 16 members are required to be drawn from the towing industry and related fields. It has broad powers to advise and make recommendations. The Coast Guard must consult it on issues affecting the towing industry.

We believe that TSAC should be abolished, unless it is reformed to include equal representation for the public, independent experts, and specialists in marine environmental and safety issues. Without such representation, those who are outside the industry and who suffer the consequences of marine accidents resulting from faulty tug/barge operations will not be assured that the Coast Guard's deliberations give proper weight to their interests.

Thank you for the opportunity to present these comments.

**TESTIMONY BEFORE THE  
COAST GUARD AND NAVIGATION SUBCOMMITTEE  
OF THE  
HOUSE MERCHANT MARINE AND  
FISHERIES COMMITTEE  
ON  
H.R. 3282  
THE TOWING VESSEL NAVIGATION SAFETY ACT OF 1993**

**MARCH 3, 1994**

**BY  
H. THOMAS KORNEGAY  
EXECUTIVE DIRECTOR  
THE PORT OF HOUSTON AUTHORITY  
AND  
PRESIDENT  
GULF PORTS ASSOCIATION**

Chairman Tauzin and members of the subcommittee, I am Tom Kornegay, the Executive Director of the Port of Houston Authority and I am also privileged to serve as the current president of the Gulf Ports Association (GPA). I would like to express the appreciation of the Association for inviting us to testify regarding a subject of considerable importance to our membership -- the critical need to increase safety on our channels. We would also like to thank you, Mr. Chairman, and Houston's own Congressman Jack Fields for introducing H.R. 3282, the Towing Vessel Navigation Safety Act of 1993. We view this legislation as an important step toward ensuring the safety of our nation's waterways.

The membership of the Gulf Ports Association consists of the 26 government entities which own and operate public deepwater port facilities on the U.S. Gulf Coast from Tampa, Florida to Brownsville, Texas. The common purpose shared by GPA member ports is expressed in our mission statement:

"To promote progress in waterborne commerce through United States Gulf Ports; to provide a forum through which member ports can address mutual concerns; to educate the public and elected officials as to the economic impact of United States Gulf Ports; and, to provide users of ports in the Gulf with innovatively managed and environmentally sensitive facilities."

I can say with pride that the commerce and activity of our Gulf Ports contribute significantly to the nation's economy and security. We contribute over \$40 billion annually to the nation's economy. Likewise, the activity of the Gulf Ports supports almost half of a million jobs, directly and indirectly.

The Gulf Ports have also proven to be vital to defense, providing facilities for the mobilization, deployment and supply of U.S. forces in time of war. In fact, during Operation Desert Shield/Desert Storm, 25% of all U.S. military cargo was handled by three Gulf Ports.

Naturally, setting and maintaining standards for safe navigation on our channels is critical to the important functions served by the Gulf Ports and ports all across the nation. Anytime safe passage is impaired both the flow of commerce and personal safety is threatened.

Ports are keenly aware of this and the Gulf Ports are doing their part to ensure safety. For instance, as a result of the passage of the Oil Pollution Act of 1990, Gulf Ports have worked diligently with state and federal agencies to develop plans for quick response to spills, and more importantly, for accident prevention through safety awareness.

We do our part, but unfortunately, we have no control over the vessels that navigate our channels. In the case of tows and barges, we must look to Congress, and more specifically to this subcommittee to do what is necessary to ensure that these vessels operate safely and that the pilots who captain them are adequately trained.

As with other port regions, the Gulf Ports have experienced serious, sometimes even life threatening, accidents as a result of ill-equipped vessels and untrained operators navigating our channels. The most devastating example is, of course, the Amtrak accident near Mobile, Alabama. You are well aware of the details of that event.

I would like to draw your attention to other examples of deficient safety measures which have resulted in loss of life, cargo and commerce in the Gulf Ports.

The Port of Houston is a unique channel of only 400 feet in width. The need for properly equipped vessels and adequately skilled piloting is even greater in channels such as the Houston Ship Channel. On December 21, 1992, there was a three vessel collision caused by a vessel which had not been inspected and did not have navigation instruments

on board. The tug, FREEMONT, was pushing the barge, DUVALL II, when it ran off course and struck an ocean going vessel, the JURAJ DALMATINAC. The FREEMONT sustained \$16,000 in damage; the DUVALL II, \$750,000 damage and loss of cargo of \$122,000; and, the JURAJ DALMATINAC, \$67,500 in damage. The Houston Ship Channel was closed for three full days. Fifteen outbound vessels were forced to remain in port; 50 inbound vessels were anchored in the Gulf of Mexico waiting for the channel to clear. The channel was restricted to one way traffic from December 25 to February 17 due to the sunken wreck of the DUVAL II. The cost in loss of wharfage fees and commerce was estimated at over \$6 million for the three-day period the channel was closed.

Our neighbors in Freeport experienced a problem in their channel in February 1986, when a towboat barge collided with the Monsanto/Quintana Barge Dock. This incident occurred in foggy conditions with a vessel which was lacking proper safety equipment. Brazos pilots and the Port of Freeport have similarly supported a need for legislation requiring each tow to be equipped with a compass, radar, VHF and current charts of areas traversed.

More recently, in the summer of 1993 in Louisiana, an accident caused by a barge and tug hitting a bridge resulted in the loss of two lives -- a mother and her unborn child. A barge and the tug attached to it, idling near the bridge and waiting to move through the Industrial Canal locks, drifted into the girder. The impact sent the four lane 144 foot section of the bridge and two cars plummeting. One of the cars was driven by a 31 year old pregnant woman. The woman and her unborn child were killed. The cause of the accident was clearly pilot error due to inadequate requirements and lack of certification of proficiency. The portion of the waterway utilizing this bridge is a busy route linking the Mississippi River, the Intercoastal Waterway and Lake Pontchartrain. Thirty-nine vessels had backed up behind the bridge before the canal was re-opened. This Industrial Canal is a major waterway for bulk cargoes. Its closure would force ships to make a 130-mile, 30 hour detour to get from the Gulf of Mexico to the Intercoastal Waterway.

These are only a few examples of the serious nature of accidents which we believe might be minimized or even avoided with proper equipment and certification required for barge and tow operators. It is for this reason, the Gulf Ports support the requirement of navigational safety equipment on all vessels which traverse our channels and further, we believe that proper training of those individuals piloting vessels is critical. This nation's ports are a vital source of support for the economy. Accidents can and should be minimized. Interruptions in normal activity which impedes the flow of commerce through U.S. ports is costly -- in terms of dollars; in terms of danger to the environment; and most importantly, in terms of the danger posed to human lives. We believe that H.R. 3282 is a positive step to enhance safety and, thus, minimize the chance of accidents. The Gulf Ports urge the swift passage of H.R. 3282.

Mr. Chairman, I would also like to mention another bill pending before the House which we believe is also important to safe port access. That is H.R. 3812, the Waterways Obstruction Removal Act of 1994, introduced by Congressmen Fields and Laughlin and pending before the Public Works Committee. H.R. 3812 provides for immediate action to remove sunken or grounded vessels that obstruct navigable waterways. It seems to us that H.R. 3812 is complementary to your own tow and barge bill -- H.R. 3282 would work to enhance safety and minimize accidents and H.R. 3812 would work to promptly clear a channel of obstruction in the event an accident does occur. We hope that every member of the subcommittee will join as cosponsors to H.R. 3812. We applaud the ranking member, Jack Fields and Congressman Laughlin for their efforts and we will work to move both bills through to enactment this year.

Testimony of

Jeffrey C. Smith  
Executive Director

Committee for Private Offshore Rescue and Towing  
(C-PORT)

Before the House Subcommittee on Coast Guard and Navigation

on HR 3282

March 3, 1994

Mr. Chairman and members of the Subcommittee.

I am here today to discuss HR 3282's impact on firms which provide non-emergency towing of disabled vessels, also called assistance towing. The group I represent, C-PORT, is the national trade association for the marine assistance and rescue industry, representing over 140 companies across the nation.

As you know, HR 3282 would affect all uninspected vessels engaged in "towing." The problem is that that term "towing" can indicate two very different types of operations. It can mean a commercial tow such as a tug pushing a barge, or it can mean an assistance tow such as a 22 foot rescue vessel towing a disabled recreational boat which has run out of fuel.

The differences between vessels engaged in commercial towing and those engaged in assistance towing are substantial. An uninspected commercial towing vessel is a 50-200 foot long vessel weighing 10 to 100 tons which tows or pushes barges of cargo weighing hundreds of tons. An uninspected assistance towing vessel is generally a 17-30 foot long vessel which tows recreational vessels weighing less than 8 tons.

However, to prove once again the existence of the law of unintended consequences, HR 3282 would treat a 22 foot rescue boat and a 70 ton commercial tug the same. Besides being impractical, placing a radar and fathometer on small rescue/utility boats is not recommended by the Department of Transportation study or any other report. In fact, most Coast Guard vessels less than 26 feet do not contain radar, while all of the Coast Guard's vessels 41 feet and larger do carry radar as standard equipment.

I submit that the intention of HR 3282 is to target large towing vessels engaged in commercial towing, of the type involved in the tragedy in Mobile, Alabama last September 22, and as recommended in the DOT report following the accident.

The marine assistance industry was created only 11 years ago by this very Subcommittee when it restricted the Coast Guard from engaging in non-emergency towing of vessels. In this tradition, at the upcoming markup on HR 3282, I urge the subcommittee to continue to exercise astute policymaking by giving favorable consideration to an amendment which would exempt firms engaged in assistance towing of disabled boats from the provisions of the bill.

Thank you for this opportunity.

*(pictures of typical industry vessels attached)*

# Examples of typical marine assistance towing vessels



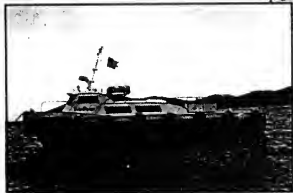
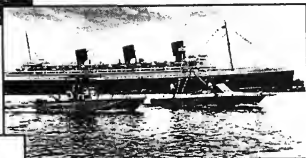
*Offshore Marine Towing  
Larry Acheson  
Lighthouse Point, Florida*

*Southeastern Marine  
Don Rich  
Noank, Connecticut*



*Maryland Coast Towing  
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STATEMENT OF

CAPTAIN JOHN WALTON

EXECUTIVE ASSISTANT TO THE PRESIDENT

INTERNATIONAL ORGANIZATION OF MASTERS, MATES & PILOTS, ILA, AFL-CIO

TO THE

SUBCOMMITTEE ON COAST GUARD AND NAVIGATION

ON

HR 3282

MARCH 3, 1994

My name is Captain John Walton. I am executive assistant to Captain Timothy A. Brown, International President of the International Organization of Masters, Mates & Pilots, ILA, AFL-CIO (IOMM&P). I have personal onboard work experience in both the towing segment and deep-sea segment of the maritime industry. I appreciate this opportunity to comment on HR 3282, a bill introduced by Chairman Billy Tauzin, to amend Title 46, USC, to improve towing vessel navigational safety. You may recall, Mr. Chairman, that I testified before your committee on March 17, 1992, on HR 3942, a bill introduced by Congressman Neil Abercrombie, which would have established requirements for manning and watches on uninspected towing vessels. I can only remark that the tragic events of the last year have only served to emphasize the necessity for comprehensive changes in the laws regulating the towboat industry.

While we appreciate the recognition that there is a problem as evidenced by the introduction of HR 3282, we feel that this legislation is only the beginning of a solution. HR 3282 calls for minimum navigational safety equipment for towing vessels and for the demonstration of proficiency in the use of navigational safety equipment thus required. Most of the vessels manned by the MM&P already have this mandated equipment and our union has always prided itself on the highest levels of competence of our members. While we agree that if there are towing vessels out there without this equipment, it should certainly be required, I would emphasize that when manning is reduced to dangerous levels neither all the equipment in the world nor the highest level of professionalism may be enough to prevent an accident.

The MM&P is extremely concerned about the health, safety and environmental threats posed by the operation of uninspected towing vessels due to the lack of proper Federal manning and watchstanding regulations.

When a tow boat operates with one person on watch on the bridge and no one on duty in the engine room, the potential for an accident

is great. The person on watch not only has to navigate, but must transmit radio messages as well. On some of these vessels, the chart room and radio room are away from the bridge, forcing the person on watch to leave his position. The automation of the engine room and installation of an alarm to alert the man on watch does not adequately ensure the safe operation of these vessels. In the first place, automated systems can and do malfunction. Further, if the man on watch is alerted to a potential problem by an alarm, he is put in the position of reacting to a problem, rather than being able to anticipate and correct a situation before it gets out of control. By being forced to react rather than prevent, our members' lives, the vessel, the cargo, and the marine environment are put at risk.

Historically, towing vessels in the ocean and coastwise trades carried three deck officers divided into three watches, and an engineer. The industry had an enviable safety record. Then, in the 1980's, due in part to cutbacks in the oil industry, a surplus of equipment was realized. Much of this equipment wound up in the hands of "shoestring" operators. In order to gain economic advantage, these operators crew their vessels at unsafe levels, and the more established operators are forced to react by reducing manning in order to compete. Unfortunately, the courts have concluded that the present inadequate and unsafe manning levels do not violate existing law. It is, therefore, up to Congress to rectify this situation.

The MM&P believes the three watch system should be restored with a minimum of three crew members on watch at all times. This could be accomplished by requiring that vessels of more than 50 gross tons on a voyage of a duration of more than 24 hours from departure to final destination be operated by a licensed master and carry two additional mates. We believe that this is essential to ensure the safe operation of tow-vessels.

Presently, our members stand watches of six hours on and six hours off on these vessels as well as performing overtime work during off-watch, for an average work day of 16 hours. It is not unusual for the off-watch deck officers to be interrupted to monitor a host of situations such as stormy seas, equipment failure, personnel illness or any other crisis which may occur when you are hundreds of miles from shore. Our members are among the best trained and highly motivated and dedicated mariners in the world, but they are not immune from the fatigue that sets in from working an average 16 hours a day for months on end. When crew members are forced to work to the point of exhaustion, bad judgment calls are a strong possibility. Even if no lives are lost or serious injuries caused, our members put their licenses at risk due to these inadequate manning policies forced on the industry by uninspected towing vessel companies.

We also believe it is important to note that the reduced manning levels on these towboats have a long-term negative effect on the industry through the elimination of an essential training ground for future experienced Second Mates. Previously, this individual received practical, on-the-job training and experience under the direction of the Master and Chief Mate. Now that the Second Mate's position has been cut on these uninspected vessels, there is no one learning the skills necessary to move up to Chief Mate. Meanwhile, the Chief Mate has no time to spend with the Master and learn from him. There really is no alternative to take the place of the years of experience that working on board the vessel offers.

Manning on all commercial towing vessels should be set by law to ensure that Deck Officers and seamen on look-out should stand watches of no more than eight hours a day (four on and eight off) as it used to be. The Engineer should not have to be working on the deck performing able-seamen duties and, thereby, neglecting a very important part of vessel operation, namely preventative maintenance and upkeep of engines.

The IOMM&P believes that comprehensive reform of the towboat industry should put safety first: safety of life, safety of vessel and cargo, and safety of the marine environment. We strongly urge that such legislation be enacted now -- to prevent additional tragedies from occurring, rather than in response to yet another disaster.

Please let me know if the IOMM&P can be of assistance to this Committee in any way in order to ensure enactment of such much needed and long overdue comprehensive towboat industry reform legislation.

**STATEMENT OF JOHN M. GOUVEIA  
REGIONAL DIRECTOR  
INLANDBOATMEN'S UNION OF THE PACIFIC,  
MARINE DIVISION OF THE  
INTERNATIONAL LONGSHOREMEN'S AND WAREHOUSEMEN'S UNION**

**BEFORE THE HOUSE OF REPRESENTATIVES  
COMMITTEE OF MERCHANT MARINE  
SUBCOMMITTEE ON COAST GUARD AND NAVIGATION**

**HEARING ON H.R. 3282**

**MARCH 3, 1994**

Mr. Chairman and honorable members of this committee, my name is John M. Gouveia and I am a Regional Director for the Inlandboatmen's Union of the Pacific (IBU), Marine Division of the International Longshoremen's and Warehousemen's Union. I appreciate this opportunity to provide written testimony for the record on H.R. 3282, a bill related to Towing Vessel and Barge Safety. We appreciate your introducing the legislation but we respectfully suggest that it does not address the most critical issue -- crew fatigue -- which is endangering the lives of crew and threatening our environment.

The IBU is a labor organization which represents seafaring employees most of whom are employed on towing vessels. I was originally a seaman who worked on towing vessels for many years prior to becoming a Regional Director of the IBU. Therefore, I am familiar with the safety conditions on towing vessels.

At the present time the existing statutes concerning the requirements for manning and watches (work shifts) on towing vessels need to be amended to protect the safety of the public, our environment, as well as the safety of our crews on board these vessels. The potential danger created by the minimum manning and watch requirements under the current laws are enormous. The current laws put in jeopardy the crew of towing vessels, as well as the licensed personnel who are on the bridge (command center) of the towing vessel, not to mention our environment.

The current laws require only one man to be assigned to observe where the vessel is headed and to control the whole towing vessel. Should that one man on the bridge leave for any reason, or fall asleep, or succumb to a heart attack or seizure and become unconscious, the effects would be devastating; a collision or grounding would very likely cause an oil spill of great magnitude. The licensed person on "watch" in the wheel house or Bridge has a number of responsibilities including steering the vessel to avoid obstacles, plotting the vessel's course in the chartroom, and transmitting radio messages. On some of the towing vessels the

chartroom and radio room are away from the bridge. In other cases the chartroom or desk and radio are behind the person on watch, leaving him with his back to the front of the towing vessel, consequently having no one at the steering wheel (helm) and no look-out. This situation is akin to having no one watching where a moving car is going, and no one steering the car as it moves.

It is my understanding that the Exxon Valdez oil spill in Alaska occurred partly because the Captain left the bridge to go below to the radio room, to send a message to the corporate headquarters, thereby, leaving an inexperienced person at the helm. Under the current laws regulating manning on towing vessels, the Exxon Valdez scenario stated above, would be more likely because when the Captain leaves the bridge to go to the radio room for example, no one would be at the helm.

Currently, there are times when the person on watch will leave his post to use the bathroom, or to get a cup of coffee, or maybe a snack. In the worst possible scenario, the consequences of the bridge being unmanned, when the barges are loaded with fuel, is that the towing vessel will run aground or collide with another vessel. Today most towing vessels are equipped with an automatic pilot, but even these devices have been known to malfunction.

Therefore, if the person manning the helm leaves the helm because he is relying on the automatic pilot and the automatic pilot fails, the tow will be out of control with no one watching where the vessel is going.

Today, automated alarm systems are installed within the engine rooms. Should a break down occur, the alarms are not activated until after the fact, whereas, if manned properly, some one would be able to see, hear, or possibly smell a problem and correct it before it happens.

Under the current statute, the minimum manning for uninspected vessels on runs less than 600 miles can be as little as two men. All that is needed is two deck officers on a six on and a six off 12 hour watch system. This results in only one man at a time running the whole towing vessel.

The minimum manning level is unsafe and must be changed, in order to avoid the foregoing hazards to the environment and the crew. The towing vessel Companies will even go so far as to say that what we are asking, will be costly, and there may not be enough bunk space on most of these vessels. This assertion is absolutely untrue. Most of these vessels have sufficient space to sleep up to ten crew men now, and should these spaces be unavailable, they can be readily made available with the least amount of alterations at a relatively low cost.

Today, the practice of no Able Seaman or Ordinary Seaman on deck, is at the very least inadequate. Some Companies are running these towing vessels with no AB's, and this violates Federal Law.

There are some Companies that are sailing with Oilers or Wipers, and engine room personnel. They proceed to give the Coast Guard a letter stating that said Oiler or Wiper has enough sea time, the Coast Guard tests this person for a Mate, he passes the test, then becomes a Mate on watch by himself, with no competent bridge experience. We recently had a similar situation here in Hawaii, but this so called Mate ran into an Island. Another incident recently occurred with an engineer, who lost his finger tips, while trying to free a line on deck.

In a December 6, 1993 report entitled "Review of Marine Safety Issues Related to Uninspected Towing Vessels", the Coast Guard stated that, of the 12,971 marine casualties involved uninspected towing vessels between 1980 and 1991, 7,664 were directly related to personnel errors (59%). Section 3 of the "Towing Safety Act" attempts to address these personnel deficiency problems by; (1) increasing the number of licensed personnel on towing vessels; (2) augmenting the qualifications for obtaining a towing vessel license; (3) increasing the number of experienced deck hands; and (4) establishing a mechanism for removing negligent or incompetent individuals from the industry.

Also see attached copy of Associated Press -- Birmingham, Alabama

There have been too many near disasters and oil spills nationwide. The Tow Boat Industry has expanded a great deal in the last 30 years or more, and it is about time we have the laws of this great nation amended to rectify the current hazards that have been created due to this expansion in the industry. These Rules and Laws have to be enforced and amended. It's like having more than one person in the cockpit of a plane, and who wants to fly without a co-pilot? Let's listen to the real Merchant Seaman who make their livelihoods on the water and who have seen too many men and women hurt and even killed. The employers may want to cut costs for more profits, but is that worth the lives of the crew and potential environmental disaster?

Legislation should be enacted to address crew fatigue and inadequate manning on towing vessels for the entire United States of America, what is already applicable to the Great Lakes. We have got to go back to how it used to be, when you sail in the department that you sign on for i.e., Deck Engine, or Steward Department and not work alternately. We need to maintain a two men watch on the Bridge while the vessel is under way and maintain a manned engine room.

Thank you for allowing me to submit testimony on behalf of the working men and women of the Inlandboatmen's Union of the Pacific, Marine Division of the International Longshoremen's and Warehousemen's Union. I would be pleased to respond in writing to any questions or comments from the members of this Committee.

# Pilot in Amtrak Disaster Failed Test Seven Times

Associated Press

BIRMINGHAM, Ala. — The eighth time the pilot of the towboat involved in Amtrak's deadliest wreck took the Coast Guard license exam he passed it.

Willie C. Odom, pilot of the MV Mauvilla the night of Sept. 22, had been promoted and demoted several times before the disaster that claimed 47 lives near Mobile. He had three minor accidents within a three-month period while piloting other boats, the Birmingham News reported Thursday.

The information was in sworn statements given in depositions by officials of Warrior & Gulf Navigation Co., which operated the Mauvilla, in connection with litigation stemming from the disaster, the newspaper said.

The depositions are not part of the public record in U.S. District Court in Mobile, where the litigation is pending. An attorney for some of the families of victims, Stephen Heninger of Birmingham, confirmed the accounts reported by the newspaper Thursday. Mr. Odom's attorney, Donald Briskman of Mobile, said he would have no comment on a pending case.

In the depositions, Warrior & Gulf officials said the Coast Guard was given incorrect information about Mr. Odom in one license application, where he was described as being a pilot trainee, rather than a deckhand, for a four-year period. But Warrior & Gulf's general manager, Andy R. Harris, said it was not improper for the company to seek to have Mr. Odom take the license exam eight times in order to pass it.

According to federal investiga-

Willie C. Odom, pilot of the MV Mauvilla the night of Sept. 22, had been promoted and demoted several times before the disaster that claimed 47 lives near Mobile.

tors, the Mauvilla got lost in fog and its tow of barges got loose, ramming a railroad bridge that spanned Bayou Canot. A short time later, Amtrak's Sunset Limited passenger train plunged from the damaged bridge, with 44 passengers and three crewmembers dying, most of them drowning in a submerged train car.

Factors involved in the disaster, according to federal investigators, include Mr. Odom mistaking the bridge for a barge on his radar, a lack of lights on the bridge or warning signs at bayou waters.

Andrew Stabler, the Mauvilla captain who had turned the boat over to Mr. Odom before the disaster, was asked during his deposition what grade he would give Mr. Odom for his handling of the barge on the night of the wreck.

Mr. Stabler declined, saying it was "a fairy-tale question," but after the question was repeated several times Mr. Stabler said he would give Mr. Odom an F.

A trial is scheduled for June 1 on Warrior & Gulf's petition to limit its liability in the case to \$422,000. The company recently asked the court to dismiss the petition, but the court has not ruled.



March 7, 1994

The Honorable W.J. (Billy) Tauzin  
Chairman, Subcommittee on Coast Guard and Navigation  
Committee on Merchant Marine and Fisheries  
U.S. House of Representatives  
Washington, D. C. 20515

Dear Mr. Chairman:

As the national association representing this country's marine insurers, the American Institute of Marine Underwriters (AIMU) would like to commend you and the co-sponsors of H.R. 3282 for acting to mandate the carriage of basic navigational aids aboard inland towing vessels. We share your hope that legislation can be enacted by the anniversary date of the Amtrak derailment at Bayou Canal, Alabama.

AIMU's member companies have an obvious vested interest in measures aimed at reducing maritime accidents. A combination of improved technology and better trained personnel can be expected to yield results which will be reflected in vessel operators' claims experience. While AIMU refrains from endorsing new technologies which have not proved themselves, the navigational equipment listed in Section 2 of H.R. 3282 is generally accepted as worthwhile. In your work to refine this bill, however, we urge an amendment to

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provide the Secretary with the flexibility to alter or adapt specific requirements in order to take into account varying conditions in particular areas and types of operations.

We also support the change in licensing regulations proposed in Section 3 of the bill to require operators to demonstrate proficiency in the use of prescribed equipment. This is a sensible corollary to requiring carriage of the equipment.

The expedited reporting of casualties contained in Section 4 is a potential life-saver and aid to mitigation of damages caused by accidents. We strongly support this provision.

Safety regulation of the maritime industry is a primary and continually evolving mission of the Coast Guard. We are aware that some have suggested expansion of H.R. 3282 to mandate new manning and inspection requirements for vessels operating on our inland waters, the subject of the study proposed in Section 5 of the bill. Under its existing authority and as a result of a study ordered in September by the Secretary of Transportation, the Coast Guard is already working on these related concerns. AIMU respectfully suggests that final Congressional action on H.R. 3282 should not be jeopardized by trying to expand the bill to cover additional requirements unless consensus can be reached with those to be impacted. Instead, this effort should be recognized as an important step in a continuing process of improving maritime safety.

We thank you for considering our views on this important matter and ask that this letter be included in the record of your hearings on H.R. 3282.

Very truly yours,

  
Walter M. Kramer  
President

### The Application of Sensors in Monitoring Vessel Movement and Position

Where the potential for loss of life or damage is considerable, the trend within all transportation industries has been to provide the pilot of a vehicle with as much pertinent information as possible to assist in the piloting operation. Sensors and other devices that provide precise measurements or advance warning of impending problems or dangers are used to augment the pilot's natural sensing abilities wherever possible. Commercial aircraft navigation and collision warning systems are an excellent example of how technology has been successfully applied in the interest of improved operating safety.

The marine industry has followed suit with the advent of global positioning systems (GPS) and improvements in marine radars, LORAN, and other navigational systems. On-board electronic positioning systems continue to be of limited value, however, during some piloting operations. They are incapable of providing velocity and position information with sufficient accuracy to assist a vessel during a docking operation, or when transiting a bridge structure or lock. In tight situations such as these, distances in tenths of feet and velocities in hundredths of knots become important. Left with few devices, the pilot continues to depend on his "feel" for how the ship is progressing and his ability to "sense" how environmental forces are affecting the vessel to successfully complete these operations.

A system is now being developed, however, that can assist pilots in these situations. A vessel docking system is being constructed at a marine terminal on the West Coast that will provide precise position information directly to the vessel as it approaches the terminal. The system will incorporate the latest available sensor technology, while its modular in design will provide the flexibility needed to apply this same technology to other tight maneuvering situations, such as bridge structure or lock transits.

Vessel Docking System - The Vessel Docking System (VDS) will assist large vessels as they berth at marine terminals. A series of low power radar and laser sensors will be strategically placed along the dock to determine the vessel's distance, angle of approach, and approach velocity relative to the dock. This and other pertinent information will be processed and transmitted directly to the vessel on a real-time basis using portable receivers. Once the vessel is moored, its position alongside the dock will be monitored continuously to provide advance warning of drift-off.

The system will display the following:

- Approach velocity relative to the dock
- Distance off the dock
- Vessel angle of approach
- Vessel drift-off

In addition, the system will accept signals from other sensors and display information such as:

- Weather information
- Tide and current information
- Mooring line tension
- Cargo flow rates, manifold pressures, etc.

**Structure Collision Avoidance** - Transiting bridge structures and locks are tight maneuvering situations that demand a level of piloting expertise similar to that required when docking a vessel at a marine terminal. VDS technology can be used to assist the pilot in these situations. Ranging and velocity sensor stations placed at strategic positions can monitor a vessel's progress as it approaches and completes its transit through a bridge structure or lock. As with the VDS, velocity and distance information is provided directly to the vessel on a real-time basis in an annotated pictorial format.

The system would display the following:

- Structure identification, including vertical and horizontal clearances
- Position of the vessel relative to the center line of the channel
- Position of the vessel relative to key structures
- Velocity of the vessel relative to the structures
- Graduated close proximity alarms
- Status of other traffic in the immediate area
- Information via other sensors, such as wind velocity, wind direction, current speed, and water depth

**Local Traffic Information System** - The location and status of traffic in the immediate area is of primary importance to any vessel transiting a navigable waterway. In a meeting or overtaking situation, the pilots of both vessels must decide in advance where and how they will meet to ensure it is done safely. A vessel approaching a bend in the channel must know what traffic will be encountered before negotiating the turn. On-board marine radar systems are of limited value on inland waterways because they are incapable of looking

around bends. In these situations the vessel must depend solely on VHF radio communications to determine the presence and status of traffic in the immediate area.

The directional sensor technology being tested under the VDS project is well suited for inland waterways where bluffs and river bends create a significant number of blind spots. Sensors placed at strategic locations along the channel can identify the location and speed of traffic moving up or down the channel. As with the vessel docking and structure collision avoidance systems, this information can be transmitted to vessels using portable receivers, giving each vessel in the immediate area advance notice of the other's presence.

Regional Vessel Traffic System - Vessel Traffic Systems (VTS) operating within several ports around the United States attempt to reduce the risk of collision or grounding by monitoring and controlling the flow of vessel traffic. These systems rely on centrally located 360 degree sweep radars and vessel position reporting by VHF radio to monitor location and flow of traffic. As designed, these systems are effective where activity is concentrated in one area but impractical in situations where activity is spread over a wide area, such as with a river system.

Using directional sensors to monitor traffic flow, and taking advantage of communications technology already available, a Regional Vessel Traffic System (RVTS) can be established for an extensive area such as a river system. GPS information, transmitted by each vessel via wireless data link directly to a RVTS Center, can be incorporated with information received from strategically placed directional sensors to provide an extensive vessel tracking system. Traffic can then be monitored and controlled as necessary to reduce congestion and the potential for casualties. Vessels would receive pertinent information on all areas of the river system, including weather updates and lock transit scheduling information.

As presented, the RVTS can provide an additional benefit to vessel operators in the area of logistical planning. Having access to up-to-date information on vessel location can help operations personnel better plan their operations and thereby reduce operating costs.

### **Major Points**

- A Vessel Docking System is being installed at a West Coast marine terminal that will assist vessel pilots during the docking operation.
- It is a land-based system using low-cost, high performance sensors to determine vessel position and movement.
- The system uses low-cost receivers to provide the vessel pilot with the following information:
  - Approach velocity
  - Distance off the dock
  - Angle of approach
  - Vessel drift-off once moored
- The system will augment VHF radio communications and can, as an option, provide the following:
  - Weather information
  - Tide and current information
  - mooring line tension
  - cargo flow rates, manifold pressures, etc.
- The vessel docking system can be configured as a Structure Collision Avoidance System to assist vessels through bridge structures and locks.
- The directional sensor technology being used for the above systems is well suited for monitoring vessel traffic on inland waterways.
- Directional sensors providing local traffic information are designed to be integrated into a network system. By incorporating information from these sensors with vessel GPS information, an extensive Regional Traffic Management System can be established.

Congress  
of the  
United States  
House of Representatives

H. MARTIN LANCASTER  
NORTH CAROLINA  
THIRD DISTRICT



March 3, 1993  
Hon. Martin Lancaster

**Question for Coast Guard Witness**

1. Do you agree that as currently drafted the bill applies to all uninspected towing vessels, including those commonly referred to as "assistance towing vessels" subject to the licensing requirement of section 8904(b) of Title 46?
2. In the Coast Guard's view, can the problems we are seeking to cure be satisfactorily addressed without imposing new requirements on "assistance towing vessels?" How would the Coast Guard react if the bill excluded "assistance towing vessels" from its coverage?

**Question for Jeff Smith, C-PORT (Committee for Private Offshore Rescue and Towing; Harry Schiffman is a member):**

1. What distinguishes your members from larger commercial towing vessels?
2. Don't some of your members' vessels routinely carry some of the equipment mandated by the bill, such as compasses, fathometers, radars, and charts? What sort of vessel would not carry such equipment?
3. Have you consulted with the Coast Guard about an exemption for "assistance towing vessels?" How has the Coast Guard responded to your inquiries?

At Large Majority Whip  
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Armed Services  
Merchant Marine and Fisheries  
Small Business

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Proposed Amendment to Towing Vessel  
Navigational Safety Act of 1994

**Background**

H.R. 3282 will amend Section 4102 of Title 46 USC to require all "towing" vessels to carry a radar, a fathometer, and compass, as well as charts and publications. It will also require that towboat operators attend an approved radar observer course.

Its provisions are aimed to implement the Department of Transportation's suggested actions in the wake of the September 22, 1993 fatal Amtrak/barge accident in Mobile, Alabama.

However, the bill would also affect firms engaged in non-emergency towing of disabled boats, which bear no resemblance to the type of commercial towing vessels the bill seeks to address. These firms, which were created by a 1983 change in Coast Guard policy, are often referred to as assistance towing firms, towing & salvage companies, and quick response marine firms. Operators of all assistance towing vessels are licensed in 46 USC § 8904(b).

**Purpose of amendment**

There is no indication that the provisions of HR 3292 are intended in any way to affect firms engaged in assistance towing of disabled vessels. Therefore, the assistance towing industry seeks an exemption from H.R. 3282.

**Suggested text of amendment**

The bill should be amended to insert: "except vessels engaged in towing a disabled vessel for consideration, as defined in 46 USC § 8904(b)" following every occurrence of the term "towing vessel" which appears on: page 2 line 6; page 3, line 2; and page 3, line 21.

**Suggested report language**

The report language should further define assistance towing as "taking into tow a vessel which is disabled or in danger."

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Respectfully Submitted,

Jeffrey C. Smith  
Executive Director  
Committee for Private Offshore Rescue and Towing (C-PORT)  
655 15th Street, NW, Suite 310  
Washington, DC 20005  
Tel: (202) 546-6993, Fax (202) 546-2121

O'Conner Engineering, Inc.

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# **The Application of Sensors in Monitoring Vessel Movement and Position**

A Presentation Before  
The United States House of Representatives Merchant Marine and Fisheries Committee

February 23, 1994

- 1. Overview**
- 2. Vessel Docking System Project - San Francisco, CA**
- 3. Applying Sensor Technology to Other Marine Traffic Situations**
- 4. Market Economics**

## 1. Overview

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- Vessel piloting is a key aspect of safe vessel operations.
- Piloting a vessel requires a clear understanding of the vessel's maneuvering characteristics and the complex environmental forces acting upon it. Variations in wind speed, wind direction, currents, wave action, and visibility all contribute to an inconsistent operating environment.
- A good marine pilot is constantly aware of his vessel's position, and can anticipate how his vessel will respond as he maneuvers within any given environment.
- Advancements in vessel design have allowed the cargo capacity of commercial vessels to increase tenfold over the last few decades. Upgrades to navigational channels and marine facilities have not kept pace, leaving less room for piloting error.
- Where the potential for loss of life or damage is considerable, the trend within all transportation industries is to provide the pilot of a vehicle with as much pertinent information as possible to assist in the piloting operation. The marine industry has followed suit, with the introduction of improved marine radars, GPS navigation systems, and the "integrated navigation system" concept. Despite these improvements, these on-board systems cannot provide the level of accuracy required to assist the pilot during docking operations or when transiting bridges or locks. For this reason there is continuing interest in docking systems that will provide the desired level of accuracy.
- Vessel docking systems are not a new concept, but their performance-to-cost ratio has historically been too unfavorable for their wide application. Recent advancements in sensor technology, however, now offer the opportunity to provide higher performance, lower cost systems.
- Vessel docking system technology can be applied to assist vessels in other ways, such as:
  - Assistance in bridge structure transits
  - Assistance in lock transits
  - Provide local traffic information
  - Provide information as part of a regional traffic system

## 2. Vessel Docking System Project, San Francisco, CA

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O'Connor Engineering has been contracted by a large oil company to develop a terminal-based vessel docking system (VDS) to assist in berthing large oil tankers. Using the latest radar and laser technology, the system will determine the vessel's distance, angle of approach, and approach velocity relative to the dock. This and other pertinent information will be transmitted directly to the vessel on a real-time basis using portable receivers. Once the vessel is moored, the system will continuously monitor for vessel drift-off.

The system will measure and display the following:

- Approach velocity relative to the dock
- Distance off the dock
- Vessel angle of approach
- Vessel drift-off

Features include:

- All weather capability
- High accuracy
- Portable receivers with oversized displays for easy readout
- Modular construction for easy component exchange
- Environmentally safe sensors
- Fully compatible system upgrades
- Low cost

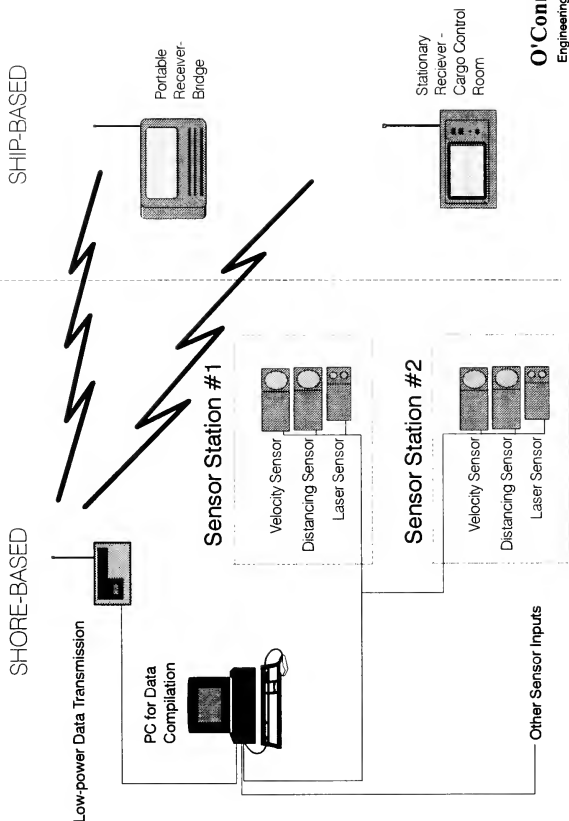
In addition, the system can accept signals from other sensors and display information such as:

- Weather information
- Tide and current information
- Mooring line tension
- Cargo flow rates and manifold pressures

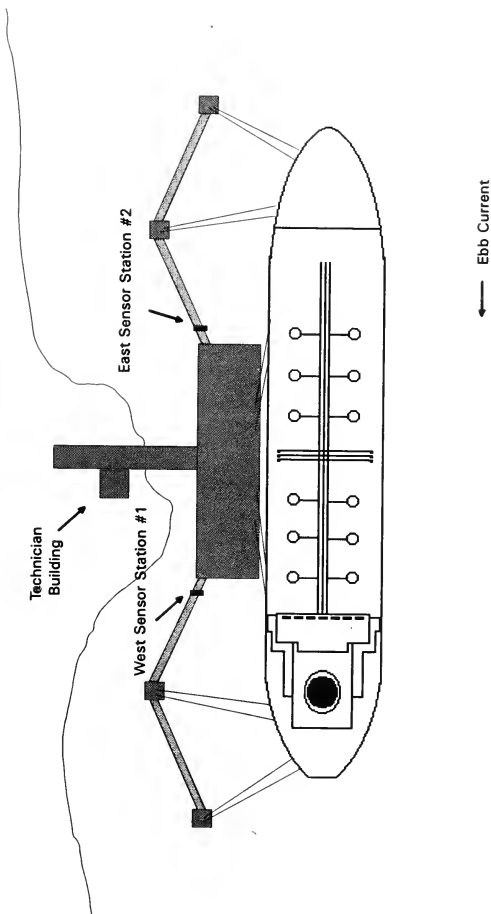
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The Application of Sensors in Monitoring Vessel Movement and Position

# Vessel Docking System



The VDS determines vessel's distance, angle of approach, and approach velocity relative to the dock. This and other pertinent information is transmitted to the vessel on a real-time basis. The system continuously monitors for drift-off while the vessel is moored at the terminal.



Approximate Scale: 1" = 75 ft

**O'Conner**  
Engineering, Inc.

### 3. Sensor Technology Uses in Other Marine Traffic Situations

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VDS technology can be used to assist vessels in other ways, such as:

- A. Assist vessels in transiting bridges and locks
- B. Provide vessels with local traffic information
- C. Monitor traffic location and traffic flow as part of a River Traffic System (RTS)

A. Structure Collision Avoidance System - The transiting of bridge structures and locks are tight maneuvering situations that demand a level of piloting expertise similar to that required when docking a vessel at a marine terminal. VDS technology can be used to assist the pilot in these situations. Ranging and velocity sensor stations placed at strategic positions can monitor the vessel's progress as it approaches and completes its transit through a bridge structure or lock. As with the vessel docking system, velocity and distance information is provided directly to the vessel on a real-time basis in an annotated pictorial format.

The system displays the following:

- Structure identification, including vertical and horizontal clearances
- Position of the vessel relative to the center line of the channel
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- Velocity of the vessel relative to the structures
- Graduated close proximity alarms
- Status of other traffic in the immediate area
- Information via other sensors, such as wind velocity, wind direction, current speed, and water depth

B. Local Traffic Information System - The location and status of traffic in the immediate area is of primary importance to any vessel transiting a navigable waterway. In a meeting or overtaking situation, the pilots of both vessels must decide in advance where and how they will meet to ensure it is done safely. A vessel approaching a bend in the channel must know what traffic will be encountered before negotiating

### 3. Sensor Technology Uses in Other Marine Traffic Situations

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the turn. Sensors placed at strategic locations along the channel can identify the location and speed of traffic moving up or down channel. This information can be transmitted to vessels in the immediate area, giving other vessels advance notice of their presence. Low cost transponders can also be used to identify this traffic. Placed at the forward end of the vessel or tow, transponders can provide vessel name, size of vessel or tow, type cargo being transported and other pertinent information.

**C. River Traffic System** - Vessel Traffic Systems (VTS) operating within several ports around the United States attempt to reduce the risk of collision or grounding by monitoring and controlling the flow of vessel traffic. These systems rely on centrally located radars and vessel position reporting by VHF radio to monitor location and flow of traffic.

Though effective for ports, this type VTS is not practical for a river system because river activity is not concentrated in one area. The normal 360 degree radar would sweep mostly land areas, while bluffs and river bends would create a significant number of blind spots. The directional radars described in this presentation are much better suited for a river system. Strategically placed, they can provide clear and precise information on traffic movement and have been designed specifically for integration into network systems.

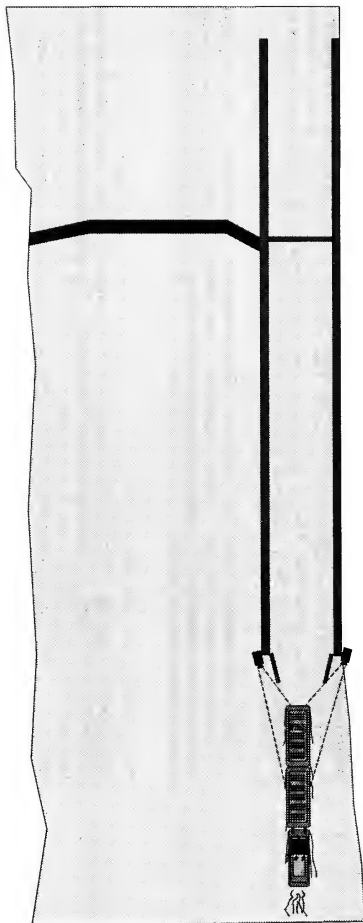
By networking a series of structure collision avoidance and local traffic information systems, an effective regional River Traffic System can be established. Vessels could then receive information on all areas on the river system. As an added option, access could be provided to vessel operators for logistical planning purposes. The following are some of the benefits that would be realized with a regional RTS based on networking:

- Advanced notice to vessels on weather conditions
- Scheduling information for lock systems
- Advance notice of traffic congestion
- Mitigation of traffic congestion

# Structure Collision Avoidance System

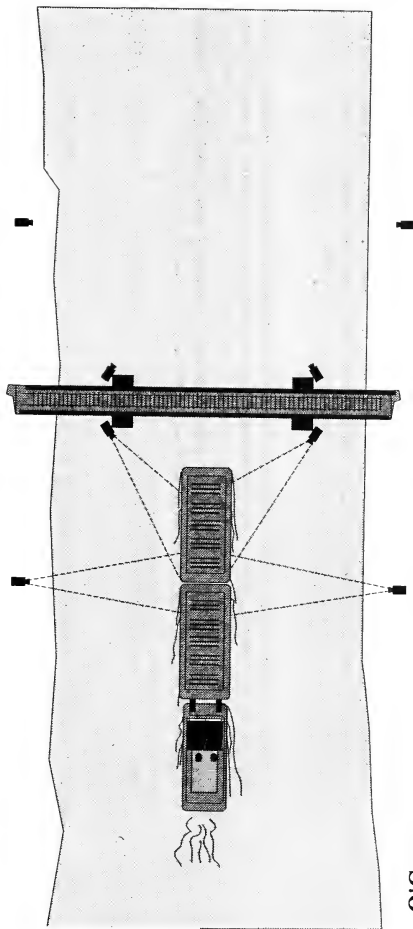
## River Lock Transit Application

System determines vessel's position and approach velocity relative to the lock.  
This and other pertinent information transmitted to the vessel on a real-time basis.



# Structure Collision Avoidance System Bridge Structure Transit Application

System determines vessel's position and approach velocity relative to the bridge.  
This and other pertinent information transmitted to the vessel on a real-time basis.



**O'Conner**  
Engineering, Inc.

#### 4. Market Economics

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O'Conner Engineering believes that, with a higher performance-to-cost ratio, there will be greater interest in the vessel docking system concept. O'Conner Engineering will continue to examine this market and will concentrate on the development of docking systems for both large and small vessels. Structure Collision Avoidance Systems will also gain acceptance as their value is demonstrated.

Currently there are no clear economic incentives for a private company to construct and manage a local or regional vessel traffic system. Government mandates will most likely be required to establish such incentives.

If vessel operators realize the added benefit of improved logistical planning through the use of a regional Vessel Traffic System, they may show a willingness to financially support such a system.



## Company Background

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O'Conner Engineering is a research and manufacturing company which was formed in March of 1992 to engineer solutions for monitoring and controlling vehicular activity in the various transportation industries. It provides low-cost, high performance position and velocity determining sensors based on the latest available radar technology. The following are brief highlights of O'Conner Engineering's recent efforts in sensor development:

**Bavarian Motor Works, Munich, Germany** - Provides doppler radar relative velocity determining devices for use as primary components for smart cruise control and collision warning systems.

**U.S. Department of Transportation, East Liberty, OH** - Providing doppler radar relative velocity determining devices for evaluation as blind spot detection and collision warning systems on large trucks.

**Traffipax Traffic Radar, Dusseldorf, Germany** - Provides relative velocity determining devices, front end component only (no signal processing), as integral components for law enforcement radar systems.

**University of California, Berkeley, CA** - Provided five platooning radar systems under the University of California's PATH Project. Under this project, the University uses various sensor systems to "platoon" automobiles on the highway free of driver-vehicle interaction. The O'Conner systems provide ranging and relative velocity information for maintaining proper vehicle speed and separation.

**San Francisco, CA** - O'Conner Engineering has been contracted by a large oil company to develop a vessel docking system to assist large tankers into marine terminals. The system will provide a vessel's range, velocity, and angle of approach relative to the dock during berthing operations. Telemetry will be used to relay this and other pertinent information directly to the vessel on a real-time basis.

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